



University of the
West of England

ACADEMIC SERVICES

MODULE SPECIFICATION

Part 1: Basic Data					
Module Title	Environmental Protection				
Module Code	UZVSL8-30-2		Level	2	Version 1.2
UWE Credit Rating	30	ECTS Credit Rating	15	WBL module?	No
Owning Faculty	Faculty of Health and Applied Sciences		Field	Health, community and policy studies	
Department	Department of Health and Social Sciences		Module Type	Standard	
Contributes towards	FdSc Public and Environmental Health MSci Environmental Health and Practice				
Pre-requisites	None		Co- requisites	None	
Excluded Combinations	None		Module Entry requirements	None	
First CAP Approval Date			Valid from	September 2012	
Revision CAP Approval Date	01/02/2017		Valid from	September 2017	

Review Date	
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Part 2: Learning and Teaching	
Learning Outcomes	<p>On successful completion of this module students will be able to:</p> <ul style="list-style-type: none"> Interpret the meaning of 'Environmental Protection'; the various components which comprise the function and its relationship with the other elements of Public and Environmental Health. (Component A, element 1) Examine sources physical, chemical and biological pollutants and evaluate their impacts on exposure pathways. (Component A, element 1 and Component B, element 1) Compare acquired and predictive data, to understand implications on human health and the wider environment. (Component A, element 1 and Component B, element 1). Undertake monitoring, measurement, sampling of pollutants and accurately record and predict the likely outcomes from the results (Component B, element 2) Illustrate the impacts of pollutants on human health, the effects on the

	<p>environment and the implications and impacts of interventions. (Component A, element 1)</p> <p>In addition the educational experience may explore, develop, and practise but not formally discretely assess the following:</p> <ul style="list-style-type: none"> • Group and collaborative work • Develop knowledge and expertise of research
Syllabus Outline	<ul style="list-style-type: none"> • Principles of Hearing and Sound Propagation. Examination of sources and impacts of Noise and their effects. Measurement of Sound and interpretation of results. Determination of health impacts of noise. Examination of methods of control and understanding and assessments of impacts. • History of Pollution Control leading to an outline of the current regulatory regime. • Nature, sources and types of Air Pollution – smoke, gaseous, particulates, dust odour. Methods of measurement and control. Effects on human health and the environment. • Sources of Water Pollution. Methods of sampling and interpretation of analytical results. Prevention and control of water pollution. Bathing and recreational water quality. Sustainable Urban Drainage systems. Potable water and private water supplies. • Nature, sources and remediation of Land Pollution. Consideration of the differing elements of the Contaminated Land Regime. Understanding and establishing source-receptor pathways and control measures. • Approaches to waste management. Importance of the Waste Management Hierarchy. Waste collection and treatment processes. Environmental and Public Health impacts of waste management. Organisation and management of waste operations.
Contact Hours	<ul style="list-style-type: none"> • 300 hours total study time • 102 hours scheduled learning <p>Scheduled learning will typically include lectures, seminars, case studies, external visits and an interactive forum. All students are expected to attend a series of tutorials.</p>
Teaching and Learning Methods	<p>Introductory lectures are supported by seminars, case studies, visits and practical workshops.</p> <ul style="list-style-type: none"> • 300 hours study time of which 102 hours will represent scheduled learning. Scheduled learning includes lectures, seminars, tutorials, project supervision, demonstration, practical classes and workshops; fieldwork; external visits; work based learning; supervised time in studio/workshop. • Independent learning includes hours engaged with essential reading, case study preparation, assignment preparation and completion. Student study time will be organised each week with a series of both essential and further readings and preparation for practical workshops. It is suggested that preparation for lectures, practical workshops and seminars will take 4 hours per week with a further expectation of 24 hours preparation for Poster defence, 24 hours used in essay assignment planning and completion and 30 hours study in preparation for the written examination. • This module will be taught across both semesters on one day per week allowing both full and part time routes to be timetabled effectively. <p>Scheduled learning includes lectures, seminars, tutorials, project supervision, demonstration, practical classes and workshops; fieldwork; external visits; work based learning; supervised time in studio/workshop.</p>

	<p>Independent learning includes hours engaged with essential reading, case study preparation, assignment preparation and completion etc. These sessions constitute an average time per level as indicated in the table below. Scheduled sessions may vary slightly depending on the module choices you make.</p> <p>Placement learning: may include a practice placement, other placement, year abroad.</p>																																																																								
Key Information Sets Information	<p>Key Information Sets (KIS) are produced at programme level for all programmes that this module contributes to, which is a requirement set by HESA/HEFCE. KIS are comparable sets of standardised information about undergraduate courses allowing prospective students to compare and contrast between programmes they are interested in applying for.</p> <table><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>Hours to be allocated</td><td>Scheduled learning and teaching study hours</td><td>Independent study hours</td><td>Placement study hours</td><td>Allocated Hours</td><td></td></tr><tr><td>300</td><td>102</td><td>198</td><td>0</td><td>300</td><td>✓</td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr></table> <p>The table below indicates as a percentage the total assessment of the module which constitutes a -</p> <p>Written Exam: Unseen written exam, open book written exam, In-class test</p> <p>Coursework: Written assignment or essay, report, dissertation, portfolio, project</p> <p>Practical Exam: Oral Assessment and/or presentation, practical skills assessment, practical exam</p> <p>Please note that this is the total of various types of assessment and will not necessarily reflect the component and module weightings in the Assessment section of this module description:</p> <table><tr><td colspan="4">Total assessment of the module:</td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td></tr><tr><td colspan="4">Written exam assessment percentage</td><td>50%</td></tr><tr><td colspan="4">Coursework assessment percentage</td><td>35%</td></tr><tr><td colspan="4">Practical exam assessment percentage</td><td>15%</td></tr><tr><td></td><td></td><td></td><td></td><td>100%</td></tr></table>							Hours to be allocated	Scheduled learning and teaching study hours	Independent study hours	Placement study hours	Allocated Hours		300	102	198	0	300	✓																									Total assessment of the module:										Written exam assessment percentage				50%	Coursework assessment percentage				35%	Practical exam assessment percentage				15%					100%
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Reading Strategy	<p>Core reading</p> <p>Any core reading will be indicated clearly, along with the method for accessing it, eg students may be required to purchase a set text, be given a print study pack or be referred to texts that are available electronically or in the Library. Module handbooks will also reflect the range of reading to be carried out.</p> <p>Further reading</p> <p>Further reading will be required to supplement the set text and other printed reading. Students are expected to identify all other reading relevant to their chosen topic for themselves. They will be required to read widely using the library search, a variety of bibliographic and full text databases, and Internet resources. Many resources can be</p>																																																																								

	<p>accessed remotely. The purpose of this further reading is to ensure students are familiar with current research, classic works and material specific to their interests from the academic literature.</p> <p>Access and skills</p> <p>The development of literature searching skills is supported by a Library seminar provided within the first semester. Students will be presented with further opportunities within the curriculum to develop their information retrieval and evaluation skills in order to identify such resources effectively. Additional support is available through the library web pages, including interactive tutorials on finding books and journals, evaluating information and referencing. Sign up workshops are also offered by the Library.</p> <p>Indicative reading list</p> <p>The following list is offered to provide validation panels/accrediting bodies with an indication of the type and level of information students may be expected to consult. As such, its currency may wane during the life span of the module specification. However, as indicated above, current advice on readings will be available via the module handbook.</p>
Indicative Reading List	<p><i>The following list is offered to provide validation panels/accrediting bodies with an indication of the type and level of information students may be expected to consult. As such, its currency may wane during the life span of the module specification. However, as indicated above, CURRENT advice on readings will be available via other more frequently updated mechanisms. You are directed toward the latest editions of:</i></p> <p>Environmental Protection UK. Pollution Control Handbook 2009</p> <p>The Essential Guide to UK and European Pollution Control Legislation. Brighton.</p> <p>Hill, M.K. Understanding Environmental Pollution, Cambridge University Press.</p> <p>Metcalf, S. and Derwent, D. Atmospheric Pollution and Environmental Change, Arnold Publishers, Oxford University Press.</p> <p>Radojevic, M. and Bashkin, V.N. Practical Environmental Analysis. The Royal Society of Chemistry, Cambridge.</p> <p>Smith, B. J. Peters R.J. Acoustics and Noise Control (2nd Ed) Longman.</p> <p>Bell, S. and MacGillivray, D. Environmental Law. Blackstone Press.</p> <p>Zakrzewski, S. F. Environmental Toxicology, 3rd Edition, Oxford University Press.</p> <p>Godish T, Air Quality, 3rd Edition, Lewis Publishers</p> <p>O' Neill P, Environmental Chemistry, Chapman & Hall</p> <p>Kiely, G. Environmental Engineering, McGraw-Hill.</p> <p>Tebbutt TH, Principles of Water Quality Control, 4th Edition, Pergamon</p> <p>Recommended Journals: (all available from: http://www1.uwe.ac.uk/library/)</p> <p>Environmental Pollution</p> <p>The Science of the Total Environment</p> <p>The ENDS Report</p> <p>Useful websites:</p> <p>The UK National Air Quality Information Archive web page: https://uk-air.defra.gov.uk/</p> <p>The Atmospheric Research and Information Centre: https://ncar.ucar.edu/</p> <p>The DEFRA Environmental protection page: https://www.gov.uk/government/organisations/department-for-environment-food-rural-affairs</p> <p>The Environment Agency web page: https://www.gov.uk/government/organisations/environment-agency</p> <p>On-line Courses</p>

Part 3: Assessment

Assessment Strategy	<p>A range of assessment techniques will be employed to ensure that learners can meet the breadth of learning outcomes presented in this module alongside the ability to demonstrate transferable skills e.g. communication skills.</p> <p>Examination: A set of questions will be designed to allow students to apply first principles of their academic study to unseen scenarios.</p> <p>Essay: An extended piece of writing encouraging students to engage with both the essential and the further reading to justify an intervention within the field of environmental protection.</p> <p>Practical Assessment: Controlled interview on the subject of the monitoring of pollutant(s) in the environment.</p> <p>Opportunities for formative assessment exist for each of the assessment strategies used. Verbal feedback is given and all students will engage with personalised tutorials setting SMART targets as part of the programme design.</p>
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Identify final assessment component and element	Component A	
% weighting between components A and B (Standard modules only)	A:	B:
	50%	50%
First Sit		
Component A (controlled conditions) Description of each element	Element weighting (as % of component)	
1. Examination (2 hours)	100%	
Component B Description of each element	Element weighting (as % of component)	
1. Essay (1500 words)	70%	
2. Controlled interview (15 minutes)	30%	

Resit (further attendance at taught classes is not required)	
Component A (controlled conditions) Description of each element	Element weighting (as % of component)
1. Examination (2 hours)	100%
Component B Description of each element	Element weighting (as % of component)
1. Essay (1500 words)	70%
2. Controlled interview (15 minutes)	30%
If a student is permitted a retake of the module under the University Regulations and Procedures, the assessment will be that indicated by the Module Description at the time that retake commences.	

