Appendix 1: Programme Specification and Curriculum Map for *MSc Sustainability and Environmental Management*

1. Programme title	*MSc Sustainability and Environmental Management*
2. Awarding institution	Middlesex University
3. Teaching institution	Middlesex University
4. Programme accredited by	Institute of Environmental Sciences (IES)
5. Final qualification	PD Diploma/ MSc
6. Academic year	2018-19
7. Language of study	English
8. Mode of study	FT/PT

9. Criteria for admission to the programme

A good Honours degree (2nd class honours grade 2 or above) in a relevant discipline OR A good Honours degree in any discipline plus relevant work experience OR a good Honours degree in any discipline plus proven relevant personal experience and motivation OR substantial (normally 3 years or more) relevant professional work experience.

Applicants outside these criteria may be considered – this will normally involve interview plus request of additional personal statement of relevant experiences.

Applicants whose first language is not English must prove competence to study at post-graduate level in English. Normally this will involve certification of

competence (IELTS minimum 6.5, TOEFL [paper] 575 minimum, TOEFL [computer] 232 minimum).

10. Aims of the programme

This programme seeks to provide both a holistic and practical approach to sustainability practice with a view to orienting the student towards the ethics and values of sustainability while also providing for the technical capability to work within the field of practice. The course is designed to respond to academic, professional and employment needs.

Continuing professional development is assured through professional body recognition and alignment with professional skills required for environmental assessment, decision making and practical assessment methods aligned to professional practice.

The programme aims to:

1. Provide students who have a professional or general interest in the application of sustainability principles with the opportunity to deepen their overall understanding and their knowledge of specialised topic areas.
2. Provide students with the knowledge and skills needed to develop a career in sustainability and environmental management interventions and with an advanced knowledge of evolving theoretical, conceptual and policy debates.
3. Develop student competence in a range of practice and research methodologies and problem solving skills
4. Provide the analytical skills needed at an advanced level to critically evaluate and assess environmental management practice and policy at a range of scales
5. Develop students' ability to critically review the links between global and local contexts including issues, policies and management actions
6. Adopt a broad analytical approach to sustainable management of environment which integrates theory and practice in a holistic manner

7. Prepare students to the professional standards that qualify them for an Associate membership at the Institute of Environmental Sciences; or higher membership with appropriate work experience.

11. Programme outcomes	
A. Knowledge and understanding On completion of this programme the successful student will have knowledge and understanding of: 1. Key principles and concepts of Sustainability and Environmental Management and how these relate to current environmental and social issues. 2. Current policies and institutions and legislation, from the local to the global scale that influence and respond to changing sustainability agendas. 3. Applied approaches to the effective assessment and management of environmental aspects in practice and the complexity of factors influencing their effectiveness 4. Key principles of Sustainability and the relationship of these to current debates in environmental management and society. 5. A wide range of research methodologies suitable for application at the post-graduate level	**Teaching/learning methods** Students gain knowledge and understanding through attendance in lectures, seminars and laboratories; through a variety of directed and self-directed learning activities e.g. group projects, journal clubs, case study analysis, field visits, student presentations. Electronic resources will be used to enhance student learning experiences. Students will be directed to explore a diverse range of learning materials such as e-journals, e-books and useful web links. **Assessment Methods** Students' knowledge and understanding is assessed by written essays, reports and seminar papers that focus on key principles, concepts and relating theory to practice. Class presentations assess student ability to synthesise and make effective use of case study material. The dissertation assesses the student's grasp of a narrow field of inquiry and of research methodology.

For the PGDip.students will have:1-4 (including 5 if research methods module option chosen)	
B. Cognitive (thinking) skills On completion of this programme the successful student will be able to: 1. Critically analyse competing contemporary theories and explanations of sustainability principles. 2. Critically evaluate the importance of key Environmental policy making institutions 3. Evaluate the relative roles of formal and informal institutions and personnel in managing the process of change for sustainability 4. Synthesise understanding of environmental processes and environment policy from a diverse range of sources. 5. Compare and critically evaluate various policy and environmental assessment frameworks 6. Construct reasoned and well supported arguments, justifying conclusions reached.	*Teaching/learning methods* Students learn cognitive skills through seminar discussions, group project work, the preparation of essays and the dissertation. Workshops and seminars will explore the interface between theory and practice. Workshops and conferences led by practitioners in the field of policy development and implementation. Students will learn self –criticism through group tutorials and individual feedback on coursework. **Assessment Method** Students' cognitive skills are assessed by extended essays and seminar papers, reports, presentations (group and individual), analysis reports and case studies, proposal writing and the dissertation report

For the PGDip.students will have: 1-6	
C. Practical skills On completion of the programme the successful student will be able to: 1. Research and critically review information sources 2. Select and apply appropriate qualitative and quantitative practice and research skills in collecting, analysing and using data to determine outcomes. 3. Independently prepare and plan a realistic and appropriate research proposal with particular reference to the management of time and other resources 4. Make an effective individual presentation and contribute to a group presentation using appropriate supporting visual and oral presentation skills. 5. Synthesise the above skills in the successful implementation and writing up of a research project or technical reports *For the PGDip.students will have: 1, 2, 4, 5*	***Teaching/learning methods*** Students learn practical skills through lectures that provide basic information on key investigation techniques and through a range of workshops in core and optional modules. These workshops will involve students in a range of group activities, data collection exercises, presentation preparations and will provide opportunities for peer and self-appraisal. ***Assessment Method*** Students' practical skills are assessed by: The final dissertation report which will assess most of these skills and in addition some modules include assessment where there is a practical element for e.g. the bibliographic exercise in the research Methods module. Other coursework will assess student ability to write in a number of different styles and formats

D. Graduate Skills	**Teaching/learning methods**
On completion of this programme the successful student will have developed skills for: 1. Effective team work 2. Effective communication in verbal and visual forms of presentation 3. Ability to write in a variety of formats (e.g. essays, reports, critiques) 4. Use of appropriate IT packages 5. Time management 6. Independent learning 7. Professional practice, including consideration of ethical , societal and financial issues *For the PGDip.students will have: 1-7*	Students acquire graduate skills through participation in group work, practical work, seminars, presentations, data analysis exercises, problem-solving worksheets, student led journal clubs, self-directed learning materials. **Assessment** Students' graduate skills are assessed by essays, presentations, reports, group project, data analysis assessments, and dissertation research.

12. Programme structure (levels, modules, credits and progression requirements)

12. Overall structure of the programme

Students on the MSc in Sustainability and Environmental Management programme will take four core compulsory modules of 15 credits each and one option from a prescribed list (either a full year 30 credit module option or two term long 15 credit modules in line with option outlines). In addition students will complete a 30 credit research methods module plus 60 credit module leading to the submission of a research dissertation,

The core compulsory modules will focus on developing the students' critical knowledge and understanding of the relevant theories, environmental principles and processes, policy issues and institutions. They also focus upon development of both technical and professional skills in environmental assessment and management. It is expected that the students will draw on this body of knowledge in developing and executing their dissertation research.

The research methods module will provide many of the practical research skills needed to complete the research dissertation work. It will also provide guidance on topic development and the research design process.

In the module options students have the opportunity to either acquire specialist knowledge in aligned sustainability practice or gain employability skills through an integrated work placement option.

Students opting for the PG Dip will take the four core modules plus either 2 options or 1 option plus the research methods module to have the future choice to progress to MSc level.

12.2 Levels and modules.

This section contains a more detailed description level-by-level of the programme structure, modules and credits.

Compulsory Modules	Optional Modules	Progression Requirements
MSc/PG Dip Students must take all of the following: • PRS4510 Global Sustainability Issues & Practice (15 credits) • PRS4520 Applied Sustainability Case Study (15 credits)	Option 1 • PRS4999 Professional Experience Placement (30 credits) Option 2	**MSc:** Student must successfully complete PRS4299 Research Methods module before proceeding to the PRS4699 MSc project.

• PRS4530 Environmental Law and Governance (15 credits) • PRS4700 Environmental Assessment and Management (15 credits) **MSc. Also PG Dip for choice of future progression to MSc** • PRS4299 Research Methods (30 credits) **MSc Only** • PRS4699 MSc project (60 credits)	• PRS4434 Factors affecting risk and strategic risk intervention (15 credits) • PRS4435 Flood Risk Management (15 credits)	Student must pass all compulsory modules plus 1 option. **PG Dip:** Student must pass all noted compulsory modules plus either 2 options or 1 option plus PRS4299 for future progression choice to MSc

12.3 Non-compensatable modules	
Module level	*Module code*
7	*PRS4510 PRS4520 PRS4530 PRS4700 PRS4299 PRS4699*

13. A curriculum map relating learning outcomes to modules
See Curriculum Map attached.
14. Information about assessment regulations
Each module is separately assessed, with the mode of assessment reflecting the learning outcomes for the particular modules. Candidates *__must__* pass all the components of each module. The final mark of each module will be an aggregate of all the passed components which may or may not consider weighting as determined by the module learning unit narrative. Core modules on this programme *__cannot__* be compensated due to limited redundancy in testing learning

outcomes in assessment and also due to professional body accreditation requirements.

The assessment breakdown for the core modules are as follows:

PRS4510 Global Sustainability Issues & Practice – 100% coursework

PRS4520 Applied Sustainability Case Study - 100% coursework

PRS4530 Environmental Law and Governance -100% coursework

PRS4700 Environmental Assessment and Management – 100% coursework

PRS4299 Research Methods -100% coursework

PRS4699 MSc project – 100% (80% dissertation + 20% *viva voce*)

The assessment breakdown for the optional modules are as follows:
Option 1

PRS4999 Professional Experience Placement – 100% coursework

Option 2
PRS4434 Factors affecting risk and strategic risk intervention - 100% coursework

PRS4435 Flood Risk Management – 100% course work

15. Placement opportunities, requirements and support (if applicable)

Work Experience Module

The programme incorporates a new two term-long professional experience module where students will be assisted and supported closely to secure a placement. This

module will provide skills for all the stages of a job application. For students who are unable to secure a placement, there will be a tutor supported case study placement prepared where students will work in the context of a case study activity to develop work related skills such as data handling, problem solving, time management and effective communications and presentation of information.

16. Future careers (if applicable)

This programme is accredited by the IES – the Institution of Environmental Sciences. Students on this programme are automatically eligible for Student Membership of the Institution. Additionally, on graduation, Student Members receive a certificate from the IES and are automatically eligible to become Associate Members. The IES has been granted a licence to award the qualification of Chartered Environmentalist (CEnv) to suitably qualified IES members and environmental professionals. By joining The IES students will start the process of working towards the achievement of chartered status with associated professional recognition.

On completion of the MSc, which includes the research methods module, there is the capability of continuing study to PhD level or pursue a further academic career in higher education in the UK. Employment levels are high for graduates of the programme. Graduates have successfully found employment in the business sector, consultancies, government ministries, non-governmental organisations (local and international) in addition to education.

17. Particular support for learning (if applicable)

All available learning resources are available to students on the programme. E-learning is implemented across the course through the use of Moodle on UniHub. This forms the primary means for dissemination of programme information and learning support for all modules. There are library services, and a Learner Development Unit to help familiarise and support students with academic learning and study.

18. JACS code (or other relevant coding system)	F800
19. Relevant QAA subject benchmark group(s)	Earth Science, Environmental Sciences and Environmental Studies benchmark statements

20. Reference points

The following reference points were used in designing the programme:

QAA Earth Science, Environmental Sciences and Environmental Studies benchmarks document (2014)

University QAAS Procedures handbook (2014-15)

University Regulations (2014-15)

University Learning and Quality Enhancement Handbook (2014-15)

Institution of Environmental Sciences

21. Other information

Please note programme specifications provide a concise summary of the main features of the programme and the learning outcomes that a typical student might reasonably be expected to achieve if s/he takes full advantage of the learning opportunities that are provided. More detailed information about the programme can be found in the rest of your programme handbook and the university regulation.

Appendix 2: Curriculum Map

Curriculum map for MSc Sustainability and Environmental Management

This section shows the highest level at which programme outcomes are to be achieved by all graduates, and maps programme learning outcomes against the modules in which they are assessed.

Programme learning outcomes

Knowledge and understanding		Practical skills	
A1	Key principles and concepts of Sustainability and Environmental Management and how these relate to current environmental and social issues.	C1	Research and critically review information sources
A2	Current policies and institutions and legislation, from the local to the global scale that influence and respond to changing sustainability agendas.	C2	Select and apply appropriate qualitative and quantitative practice and research skills in collecting, analysing and using data to determine outcomes.
A3	Applied approaches to the effective assessment and management of environmental aspects in practice and the complexity of factors influencing their effectiveness	C3	Independently prepare and plan a realistic and appropriate research proposal with particular reference to the management of time and other resources
A4	Key principles of Sustainability and the relationship of these to current debates in environmental management and society.	C4	Make an effective individual presentation and contribute to a group presentation using appropriate supporting visual and oral presentation skills.
A5	A wide range of research methodologies suitable for application at the post-graduate level.	C5	Synthesise the above skills in the successful implementation and writing up of a research project or technical reports.

Cognitive skills		Graduate Skills	
B1	Critically analyse competing contemporary theories and explanations of sustainability principles.	D1	Effective team work
B2	Critically evaluate the importance of key Environmental policy making institutions	D2	Effective communication in verbal and visual forms of presentation
B3	Evaluate the relative roles of formal and informal institutions and personnel in managing the process of change for sustainability	D3	Ability to write in a variety of formats (e.g. essays, reports, critiques)
B4	Synthesise understanding of environmental processes and policy frameworks from a diverse range of sources.	D4	Use of appropriate IT packages
B5	Compare and critically evaluate various policy and environmental assessment frameworks	D5	Time management
B6	Construct reasoned and well supported arguments, justifying conclusions reached.	D6	Independent learning
		D7	Professional practice, including consideration of ethical , societal and financial issues

MSc Programme outcomes – highest level to be achieved by all graduates																						
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	C1	C2	C3	C4	C5	D1	D2	D3	D4	D5	D6	D7
7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7

MSc Modules	A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	C1	C2	C3	C4	C5	D1	D2	D3	D4	D5	D6	D7
PRS4510 Global Sustainability Issues & Practice	x			x		x			x										x				
PRS4520 Applied Sustainability Case Study				x				x	x		x	x	x		x		x	x	x				
PRS4530 Environmental Law and Governance		x					x	x	x	x	x								x				
PRS4700 Environmental Assessment and Management		x	x						x	x	x	x			x				x				x
PRS4999 Professional Experience Placement			x																		x	x	x
PRS4434 Factors affecting risk and strategic risk intervention		x	x								x	x							x				

Module																							
PRS4435 Flood Risk Management		x				x			x	x	x	x								x			x
PRS4299 Research Methods					x															x	x		
PRS4699 MSc Dissertation					x									x	x	x			x	x		x	x

PG Diploma Programme learning outcomes

Knowledge and understanding		Practical skills	
A1	Key principles and concepts of Sustainability and Environmental Management and how these relate to current environmental and social issues.	C1	Research and critically review information sources
A2	Current policies and institutions and legislation, from the local to the global scale that influence and respond to changing sustainability agendas.	C2	Select and apply appropriate qualitative and quantitative practice and research skills in collecting, analysing and using data to determine outcomes.
A3	Applied approaches to the effective assessment and management of environmental aspects in practice and the complexity of factors influencing their effectiveness	C3	Make an effective individual presentation and contribute to a group presentation using appropriate supporting visual and oral presentation skills.
A4	Key principles of Sustainability and the relationship of these to current debates in environmental management and society.	C4	Synthesise the above skills in the successful implementation and writing up of a research project or technical reports
A5	(Option only) A wide range of research methodologies suitable for application at the post-graduate level		
Cognitive skills		**Graduate Skills**	
B1	Critically analyse competing contemporary theories and explanations of sustainability principles.	D1	Effective team work
B2	Critically evaluate the importance of key Environmental policy making institutions	D2	Effective communication in verbal and visual forms of presentation
B3	Evaluate the relative roles of formal and informal institutions and personnel in managing the process of change for sustainability	D3	Ability to write in a variety of formats (e.g. essays, reports, critiques)
B4	Synthesise understanding of environmental processes and policy frameworks from a diverse range of sources.	D4	Use of appropriate IT packages
B5	Compare and critically evaluate various policy and environmental assessment frameworks	D5	Time management
B6	Construct reasoned and well supported arguments, justifying conclusions reached.	D6	Independent learning
		D7	Professional practice, including consideration of ethical , societal and financial issues

PG Dip Programme outcomes – highest level to be achieved by all graduates																				
A1	A2	A3	A4	B1	B2	B3	B4	B5	B6	C1	C2	C3	C4	D1	D2	D3	D4	D5	D6	D7
7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7

PG Dip Modules	A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	C1	C2	C3	C4	D1	D2	D3	D4	D5	D6	D7
PRS4510 Global Sustainability Issues & Practice	x			x		x			x									x				
PRS4520 Applied Sustainability Case Study				x				x	x		x	x	x	x		x	x	x				
PRS4530 Environmental Law and Governance		x					x	x	x	x	x							x				
PRS4700 Environmental Assessment and Management		x	x							x	x	x	x		x			x				x
PRS4999 Professional Experience Placement			x																	x	x	x
PRS4434 Factors affecting risk and strategic risk intervention		x	x							x	x							x				
PRS4435 Flood Risk Management		x			x				x	x	x	x							x			x
PRS4299 Research Methods (only for PG Dip)					x												x	x				