

Programme Information & PLOs			
Title of the new programme – including any year abroad/ in industry variants			
BSc Environment, Ecology and Economics			
Level of qualification			
Please select:	Level 6		
Please indicate if the programme is offered with any year abroad / in industry variants			Year in Industry Please select Y/N
			Yes
			Year Abroad Please select Y/N
			Yes
Department(s): Where more than one department is involved, indicate the lead department			
Lead Department	Environment Department		
Other contributing Departments:			
Programme Leader			
Julia Touza			
Purpose and learning outcomes of the programme			
Statement of purpose for applicants to the programme			
<p>The degree in Environment, Economics and Ecology will equip you with skills in these three main disciplines in a way that will enable you to evaluate environmental problems and develop your own solutions. Your lecturers are experts in environmental economics, environmental policy and terrestrial and aquatic ecology. You will be trained to critically review relevant literatures in your field, and to apply techniques and methods from the three core disciplines to design research projects both locally and overseas. By your final year of study you are well equipped to undertake an independent research project in a topic of your choice. You will be trained in the use and application of digital learning technologies such as statistical packages and geographical information systems (GIS) to enhance your employability. You will develop strong teamworking skills through training and extensive opportunities for groupwork during class discussions and fieldwork. Graduates from this degree are solution-oriented, inter-disciplinary thinkers who can communicate effectively verbally, and in writing to a range of audiences the key environmental challenges facing humanity and their solutions. Graduates from this degree programme have gone on to successful careers in a wide range of areas including environmental consultancy, international aid and development and government departments.</p>			
Programme Learning Outcomes Please provide six to eight statements of what a graduate of the programme can be expected to do. Taken together, these outcomes should capture the distinctive features of the programme. They should also be outcomes for which progressive achievement through the course of the programme can be articulated, and which will therefore be reflected in the design of the whole programme.			
PLO	On successful completion of the programme, graduates will be able to:		
1	Debate, interpret and explain the ecological principles and human interactions which underlie environmental management at a range of scales using appropriate methods and norms, and engage critically with theory, knowledge and emerging issues in environmental economics, ecology and environmental studies [Knowledgeable and aware]		
2	Obtain, synthesise and critically evaluate complex information on ecology, economics and environmental studies from a wide range of reliable sources [Independent learner]		
3	Cut across disciplinary boundaries to link knowledge and experience from a wide range of research areas to understand the relationship between economic and social pressures and their impacts on the ecology of our complex global environment [Interdisciplinary thinker]		

4	Plan, design and execute research in ecology, economics and environmental studies as an individual or as part of a team using critically-selected qualitative, quantitative and field-based methods [Creator of new knowledge]
5	Critically analyse and interpret qualitative and quantitative data using appropriate tools such as GIS and statistical packages to draw meaningful conclusions from research on the ecological and economic implications of human interactions with the environment [Analytical]
6	Effectively communicate knowledge, complex ideas and persuasive arguments to professional and non-specialist audiences using verbal, written, visual and digital media [Effective communicator]
7	Recommend sustainable solutions to environment and development problems that consider broader social, political, economic and environmental contexts, and the ethical implications of their application by applying knowledge, theories and approaches from ecology, economics and policy studies [Problem solver]
8	Work responsibly as part of a team or as a team-leader to set challenging yet attainable goals [Team player]

Programme Learning Outcome for year in industry (where applicable)
 For programmes which lead to the title 'with a Year in Industry' – typically involving an additional year – please provide either a) amended versions of some (at least one, but not necessarily all) of the standard PLOs listed above, showing how these are changed and enhanced by the additional year in industry b) an additional PLO, if and only if it is not possible to capture a key ability developed by the year in industry by alteration of the standard PLOs.

We have altered a number of PLOs relevant to our Year in Industry programme and so have provided a separate proforma for this programme.

Programme Learning Outcome for year abroad programmes (where applicable)
 For programmes which lead to the title 'with a Year Abroad' – typically involving an additional year – please provide either a) amended versions of some (at least one, but not necessarily all) of the standard PLOs listed above, showing how these are changed and enhanced by the additional year abroad or b) an additional PLO, if and only if it is not possible to capture a key ability developed by the year abroad by alteration of the standard PLOs.

Explanation of the choice of Programme Learning Outcomes Please explain your rationale for choosing these PLOs in a statement that can be used for students (such as in a student handbook). Please include brief reference to:

i) Why the PLOs are considered ambitious or stretching?
 Through achieving our programme outcomes you will be equipped with the abilities and confidence to improve our understanding of the world around us and work towards developing sustainable solutions to today's environmental problems. Our outcomes require you to be critical in terms of the information you use and the research tools you employ, persuasive and clear in the ways in which you communicate, and interdisciplinary in your approaches towards understanding the environment and recommending solutions to problems. These are all characteristics that we will help you to develop through our Environment, Economics and Ecology degree and will enable you to be successful in your future career.

ii) The ways in which these outcomes are distinctive or particularly advantageous to the student:
 The programme outcomes capture the key employability skills that graduates of an Environment, Economics and Ecology degree will be asked to demonstrate when applying for successful and rewarding careers in this field of work. By providing you with a clear pathway towards achieving these learning outcomes through Key Points Training (KPT) and plentiful opportunities to use and practice these skills you will be able to draw on specific examples of work that you have undertaken to evidence your accomplishments to potential future employers. Through interactions with external environmental and industrial organisations you will see how the skills embedded in our programme outcomes can be used in the workplace.

iii) How the programme learning outcomes develop students' digital literacy and will make appropriate use of technology-enhanced learning (such as lecture recordings, online resources, simulations, online assessment, 'flipped classrooms' etc)?

a. Digital literacy - Through our Environment, Economics and Ecology degree you will develop the key digital skills needed for effective communication, finding and using reliable sources, and analysing quantitative and qualitative datasets. You will receive training in the use of the relevant digital tools at key points throughout your degree and be provided with opportunities to use them in a range of applications. This will ensure that when you graduate you are ready to effectively apply these tools in a work-based setting; b. Technology-enhanced learning - We have developed an online site (the KPT Skills Hub) that you can use to develop key skills, and improve and progress throughout your degree. The online Skills Hub complements the teaching you will receive during contact hours and gives you the tools and flexibility to work on key skills development in your own time.

iv) How the PLOs support and enhance the students' employability (for example, opportunities for students to apply their learning in a real world setting)?

The programme's employability objectives should be informed by the University's Employability Strategy:

<http://www.york.ac.uk/about/departments/support-and-admin/careers/staff/>

The programme outcomes capture the key employability skills that graduates of an Environment, Economics and Ecology degree will be asked to demonstrate when applying for successful and rewarding careers in this field of work. By providing you with a clear pathway towards achieving these learning outcomes through Key Points Training (KPT) and plentiful opportunities to use and practice these skills you will be able to draw on specific examples of work that you have undertaken to evidence your accomplishments to potential future employers. Through interactions with external environmental and industrial organisations you will see how the skills embedded in our programme outcomes can be used in the workplace. (*note same text as in box ii as I think the link to employability is the major benefit to students*)

vi) How will students who need additional support for academic and transferable skills be identified and supported by the Department?

In every case Key Points Training is linked to a key piece of assessment. The result of this assessment will signpost to you and to the department how you are progressing towards the programme outcomes as you move through your degree. We have developed an online resource (the KPT Skills Hub) that you can use outside of contact hours to support your effective development of the skills needed to be successful in your chosen degree programme. Our programmes are also designed so that you have a wide range of opportunities to use and practice key skills developed in KPT training in a number of other core and optional modules.

vii) How is teaching informed and led by research in the department/ centre/ University?

We are a research-active department and share our latest research findings and methods with you through our teaching. Throughout your degree you will be actively involved in designing and undertaking research projects aimed at both understanding the world around us and solving environmental problems. All of our courses include fieldtrips that allow you to see how the theory and knowledge you have been taught in lectures apply in a range of national and international settings. Through tutorials and seminars you will gain experience in discussing cutting-edge research and develop key communication skills. Lectures are supplemented by guest speakers from the environmental think-tank the Stockholm Environment Institute (SEI), and a range of external environmental and industrial organisations, exposing you to potential areas of future employment throughout your degree.

Stage-level progression

Please complete the table below, to summarise students' progressive development towards the achievement of PLOs, in terms of the characteristics that you expect students to demonstrate at the end of each year. This summary may be particularly helpful to students and the programme team where there is a high proportion of option modules.

Note: it is not expected that a position statement is written for each PLO, but this can be done if preferred (please add information in the 'individual statement' boxes). For a statement that applies across all PLOs in the stage fill in the 'Global statement' box.

Stage 0 (if your programme has a Foundation year, use the toggles to the left to show the hidden rows)

Stage 1

On progression from the first year (Stage 1), students will be able to:				<i>Engage with theory, knowledge and emerging issues in environmental studies, economics and ecology and be able to undertake research as part of a group</i>			
PLO 1	PLO 2	PLO 3	PLO 4	PLO 5	PLO 6	PLO 7	PLO 8
Demonstrate core knowledge of economic and ecological principles relevant for understanding environmental management challenges, and the concept of sustainable development	Obtain and use relevant sources using database tools such as Web of Science to support information needs	Demonstrate awareness of the complexity of global environmental problems, and be able to describe them with reference to the three core disciplines of economics, ecology and environmental studies	Confidently collect primary and secondary data and design some aspects of a research project as part of a group	Organise and present summaries of datasets and use basic statistical methods and programmes to analyse quantitative and qualitative data with guidance	Communicate effectively both verbally in small group discussions and group presentations, and in writing via essays and reports, and be confident in using a range of computer-based programmes to present and submit work	Demonstrate an awareness of real world environmental problems and the ways in which they can be avoided and mitigated	Work in groups to gather data in the laboratory and field, solve problems and present findings and ideas
Stage 2							
On progression from the second year (Stage 2), students will be able to:				<i>Use theoretical and practical knowledge to design and undertake research as part of a group, and critically evaluate sustainable solutions to environmental problems</i>			
PLO 1	PLO 2	PLO 3	PLO 4	PLO 5	PLO 6	PLO 7	PLO 8
Apply increasingly advanced knowledge of economic and ecological principles to critically evaluate policy instruments designed to solve environmental problems and environmental management issues at a range of scales	Synthesise and critically evaluate information from relevant sources to develop persuasive arguments	Engage with literature and data from across the three core disciplines of economics, ecology and environmental studies to formulate ideas and arguments	Design and implement a research project as part of a group, including identifying relevant research questions and developing research proposals	Start to independently design approaches for data analysis using increasingly complex statistical methods and employ a wider range of computer based programmes, such as ARCGIS, for data analysis	Articulate and visualise persuasive arguments, ideas, data and theories effectively and fluently via essays, reports, exams, discussions, and verbal presentations	Critically evaluate existing solutions to environmental policy problems using a multi-scalar perspective	Work effectively as part of a group or as a group leader in field, laboratory and classroom contexts, confidently expressing views whilst also respecting the opinions of others
Programme Structure							

Module Structure and Summative Assessment Map

Please complete the summary table below which shows the module structure and the pattern of summative assessment through the programme.

'Option module' can be used in place of a specific named option. If the programme requires students to select option modules from specific lists these lists should be provided in the next section.

From the drop-down select 'S' to indicate the start of the module, 'A' to indicate the timing of each distinct summative assessment point (eg. essay submission/ exam), and 'E' to indicate the end of the module (if the end of the module coincides with the summative assessment select 'EA'). It is not expected that each summative task will be listed where an overall module might be assessed cumulatively (for example weekly problem sheets).

If summative assessment by exams will be scheduled in the summer Common Assessment period (weeks 5-7) a single 'A' can be used within the shaded cells as it is understood that you will not know in which week of the CAP the examination will take place.

Stage 0 (if you have modules for Stage 0, use the toggles to the left to show the hidden rows)

Stage 1																																
Credits	Module		Autumn Term										Spring Term										Summer Term									
	Code	Title	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10
20	ENV00008C	Introduction to Environment, Economics and Ecology	S								A										A	E										
20		Data Analysis for Environmental Research	S									A											EA									
20	ENV00002C	Ecological Principles for the Environment	S							A						A						E				A	A	A				
10	ENV00018C	Environment, Development and Society	S									E	A																			
10		Qualitative Approaches to Social Science Research											S									E	A									
20	ENV00009C	Introductory Economics											S								A	E				A	A	A				
20	ENV00007C	Field Project (Huge & EEE)																			S				E	A						

Stage 2																																
Credits	Module		Autumn Term										Spring Term										Summer Term									
	Code	Title	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10

20	ENV00029I	Applied Economics for the Environment	S						A	E	A														
20	ENV00026I	Environmental Policy	S			A				EA															
10	ENV00001I	Ocean Management and Conservation									S							E					A	A	A
10	ENV00030I	Economics of Sustainable Development	S							E															
20	ENV00010I	Residential Field Course												S			E	A	A						
20	ENV00013I	Energy and the Environment	S								A						E					A	A	A	
20	ENV00024I	Ecosystem Processes	S								A			A			E					A	A	A	
10	ENV00002I	Climate Change: Science, Observations and Impacts									S						A	E							
10	ENV00012I	Geographical Information Systems	S							EA															
20	ENV00023I	Food, Space, Culture and Society	S				A			E	A														
20	ENV00028I	Geographies of Development	S							A								EA							
20	ENV00021I	Megacities and Urbanisation	S								A						E					A	A	A	
10	ENV00022I	Sustainable Tourism and Transport									S						A	E		A					

Climate Change: Science, Observations and Impacts	Environmental Politics						
Geographical Information Systems	Environmental Hazards						
Megacities and Urbanisation							
Sustainable Tourism and Transport							
Food, Space, Culture and Society							
Geographies of Development							
Environmental Ecology							

Management and Admissions Information

This document applies to students who commenced the programme(s) in:

2017/18

Interim awards available Interim awards available on undergraduate programmes (subject to programme regulations) will normally be: Certificate of Higher Education (Level 4/Certificate), Diploma of Higher Education (Level 5/Intermediate), Ordinary Degree and in the case of Integrated Masters the Bachelors with honours. Please specify any proposed exceptions to this norm.

Certificate of Higher Education (Level 4/Certificate)
Diploma of Higher Education (Level 5/Intermediate)

Admissions Criteria

TYPICAL OFFERS

A levels

AAB

AAB/ABB for L7F6,

L7F7, L7F8, L7F9

IB Diploma Programme

34 points

35/34 points for L7F6,

L7F7, L7F8, L7F9

BTEC Extended Diploma

DDM

DDD/DDM for L7F6,

L7F7, L7F8, L7F9

O

Length and status of the programme(s) and mode(s) of study

Programme	Length (years)	Status (full-time/part-time) Please select	Start dates/months (if applicable – for programmes that have multiple intakes or start dates that differ from the usual academic year)	Mode				
				Face-to-face, campus-based		Distance learning		Other
BSc (Hons) Environment, Economics and Ecology	3	Full-time	n/a	Please select Y/N	Yes	Please select Y/N	No	n/a

Language(s) of study

English.

Language(s) of assessment

English.

Programme accreditation by Professional, Statutory or Regulatory Bodies (PSRB)

Is the programme recognised or accredited by a PSRB

Please Select Y/N: Yes if No move to next Section
if Yes complete the following questions

Name of PSRB

Institute of Environmental Sciences, CHES

Are there any conditions on the approval/ accreditation of the programme(s)/ graduates (for example accreditation only for the full award and not any interim award)

Additional Professional or Vocational Standards

Are there any additional requirements of accrediting bodies or PSRB or pre-requisite professional experience needed to study this programme?

Please Select Y/N: No if Yes, provide details

(max 200 words)

University award regulations

The University's award and assessment regulations apply to all programmes: any exceptions that relate to this programme are approved by University Teaching Committee and are recorded at the end of this document.

Are students on the programme permitted to take elective modules?

(See: <https://www.york.ac.uk/media/staffhome/learningandteaching/documents/policies/Framework%20for%20Programme%20Design%20-%20UG.pdf>)

Please Select Y/N: Yes

Careers & Placements - 'With Placement Year' programmes

Students on all undergraduate and integrated masters programmes may apply to spend their third year on a work-based placement facilitated by Careers & Placements. Such students would return to their studies at Stage 3 in the following year, thus lengthening their programme by a year. Successful completion of the placement year and associated assessment allows this to be recognised in programme title, which is amended to include 'with Placement Year' (e.g. BA in XYZ with Placement Year'). The Placement Year also adds a Programme Learning Outcome, concerning employability. (See Careers & Placements for details).

In exceptional circumstances, UTC may approve an exemption from the 'Placement Year' initiative. This is usually granted only for compelling reasons concerning accreditation; if the Department already has a Year in Industry with criteria sufficiently generic so as to allow the same range of placements; or if the programme is less than three years in length.

Programme excluded from Placement Year?	Yes	If yes, what are the reasons for this exemption: Environment has an existing 'Year in Industry' which has an assessment mechanism & placement criteria that are very similar to the Careers With Placement Year.
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Study Abroad (including Year Abroad as an additional year and replacement year)

Students on all programmes may apply to spend Stage 2 on the University-wide North America/ Asia/ Australia student exchange programme. Acceptance onto the programme is on a competitive basis. Marks from modules taken on replacement years count toward progression and classification.

Does the programme include the opportunity to undertake other formally agreed study abroad activities? All such programmes must comply with the Policy on Study Abroad

<https://www.york.ac.uk/staff/teaching/procedure/programmes/design/>

Please Select Y/N:	Yes
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Additional information

Transfers out of or into the programme

ii) Transfers into the programme will be possible? (please select Y/N)	No	
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Additional details:

ii) Transfers out of the programme will be possible? (please select Y/N)	No	
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Additional details:

Exceptions to University Award Regulations approved by University Teaching Committee

Exception	Date approved
Please detail any exceptions to University Award Regulations approved by UTC	

Date on which this programme information was updated:

23/01/2017

Please note:

The information above provides a concise summary of the main features of the programme and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if they take full advantage of the learning opportunities that are provided.

Detailed information on the learning outcomes, content, delivery and assessment of modules can be found in the module descriptions.

The University reserves the right to modify this overview in unforeseen circumstances, or where the process of academic development, based on feedback from staff, students, external examiners or professional bodies, requires a change to be made. Students will be notified of any substantive changes at the first available opportunity.

Programme Map

Please note: the programme map below is in interim format pending the development of a University Programme Catalogue.

Programme Map: Module Contribution to Programme Learning Outcomes

This table maps the contribution to programme learning outcomes made by each module, in terms of the advance in understanding/ expertise acquired or reinforced in the module, the work by which students achieve this advance and the assessments that test it. This enables the programme rationale to be understood:

- Reading the table vertically illustrates how the programme has been designed to deepen knowledge, concepts and skills progressively. It shows how the progressive achievement of PLOs is supported by formative work and evaluated by summative assessment. In turn this should help students to understand and articulate their development of transferable skills and to relate this to other resources, such as the Employability Tutorial and York Award;
- Reading the table horizontally explains how the experience of a student at a particular time includes a balance of activities appropriate to that stage, through the design of modules.

Stage	Module		Programme Learning Outcomes							
			PLO1	PLO2	PLO3	PLO4	PLO5	PLO6	PLO7	PLO8
			Debate, interpret and explain the ecological principles and human interactions which underlie environmental management at a range of scales using appropriate methods and norms, and engage critically with theory, knowledge and emerging issues in environmental economics, ecology and environmental studies [Knowledgeable and aware]	Obtain, synthesise and critically evaluate complex information on ecology, economics and environmental studies from a wide range of reliable sources [Independent learner]	Cut across disciplinary boundaries to link knowledge and experience from a wide range of research areas to understand the relationship between economic and social pressures and their impacts on the ecology of our complex global environment [Interdisciplinary thinker]	Plan, design and execute research in ecology, economics and environmental studies as an individual or as part of a team using critically-selected qualitative, quantitative and field-based methods [Creator of new knowledge]	Critically analyse and interpret qualitative and quantitative data using appropriate tools such as GIS and statistical packages to draw meaningful conclusions from research on the ecological and economic implications of human interactions with the environment [Analytical]	Effectively communicate knowledge, complex ideas and persuasive arguments to professional and non-specialist audiences using verbal, written, visual and digital media [Effective communicator]	Recommend sustainable solutions to environment and development problems that consider broader social, political, economic and environmental contexts, and the ethical implications of their application by applying knowledge, theories and approaches from ecology, economics and policy studies [Problem solver]	Work responsibly as part of a team or as a team-leader to set challenging yet attainable goals [Team player]
Stage 1	Intro to Environment, Economics & Ecology	Progress towards PLO	Develops knowledge, understanding and awareness	KPT in finding and using sources	Develops awareness of the importance of interdisciplinarity		Develops data handling and analysis skills and experience in performing scientific calculations	KPT in verbal presentation and structuring an essay	Develops awareness of environmental problems and their solutions	Practice in working as a group

		By working on (and if applicable, assessed through)	Students will gain core knowledge from relevant disciplines including economics, ecology and environmental studies).	Training in finding sources and using them for information needs. Also, independent study and in-class discussions.	Read and review articles from a range of disciplines including inter alia: Environmental Studies, economics, ecology, human geography and political science and will debate them in small group tutorials.		Learning how to find and interpret secondary sources of qualitative and quantitative data.	Assessed presentation and assessed essay on topics specific to environment, economics and ecology	Considering a range of environmental problems relating to environmental quality, biodiversity and climate change and start to evaluate possible solutions.	Working in small groups to develop strategies for finding and interpreting secondary qualitative and quantitative data.	
Stage 1	Data Analysis for Environmental Research	Progress towards PLO				Exposure to different approaches of data collection	KPT in data handling and analysis				
		By working on (and if applicable, assessed through)				Working with datasets collected by staff in their research. Datasets will be introduced by staff in short videos.	Organising and analysing datasets collected and introduced by individual staff members (assessed by small tasks collated into a portfolio)				
Stage 1	Ecological Principles for the Environment	Progress towards PLO	Develops knowledge, understanding and awareness	Practice in finding and using sources	Develops awareness of the importance of interdisciplinarity	Practice in primary data collection	Practice in data handling and statistical analysis	KPT in scientific report writing		Practice in working as a group	
		By working on (and if applicable, assessed through)	Lectures and practicals on ecological theories and skills (assessed by exam)	Independent study: finding sources on ecological theories in preparation for scientific report assessments	Lectures and practicals on ecological problems and how society can manage and affect these (assessed by scientific reports)	Lecturer-defined practicals: primary data are collected on <i>ecology-based field studies</i>	Statistics: Analysis and interpretation of ecological data (assessed in scientific report)	Write up of scientific reports on ecological research as summative assessments		Groupwork during data collection during field practicals.	
Stage 1	Environment, Development and Society	Progress towards PLO	Develops knowledge, understanding and awareness	Practice in finding and using sources	Develops awareness of the importance of interdisciplinarity			Practice in verbal communication	Develops awareness of environmental problems and their solutions	Practice in working as a group	

		By working on (and if applicable, assessed through)	Discussions and debates on a range of developmental and sustainability issues . The topics serve as a platform during the tutorial sessions to critically engage with theory covered during the lecture sessions (assessed by exam)	Independent study and in-class discussions: <i>Identifying literature from a range of sources and synthesise the information in a coherent form to be used during discussion sessions and exam assessment</i>	Preparation for seminars that involve literature search and reviewing articles from a range of disciplines e.g development studies, environmental sciences and human geography			Preparing a power point presentation as a group, debates and discussions on sustainability issues during seminars	Seminar discussion topics which are structured to encourage problem based learning on sustainability problems and how they are entwined in legal, social, and ethical issues are set and solutions for which are discussed during the discussion sessions	Working as a part of a team during seminar discussions
Stage 1	Introductory Economics	Progress towards PLO	Develops knowledge, understanding and awareness		Develops awareness of the importance of interdisciplinarity		KPT in fundamental calculations needed for economics	Practice in verbal communication	Develops awareness of environmental problems and evaluate their solutions	Practice in working as a group
		By working on (and if applicable, assessed through)	Becoming familiar with economic thinking, and markets 'fail' the environment, and the rational for governmental policies through case studies, practicals and tutorial sessions		Discussing in groups case studies where economics tools and concepts are used for environmental conservation issues.		Interpretation of data on multiple forms (graphs, analytical, and tables) and interpretation of problem-solving/computer-simulation exercises	Communication of analytical and numerical work	Engaging with economic knowledge and approaches to evaluate sustainable policy solutions	Team work in achieving a common agreed solution to problems/questions
Stage 1	Qualitative Approaches to Social Science Research	Progress towards PLO	Develops knowledge, understanding and awareness			KPT in the research process (qualitative methods)	KPT in data handling and analysis (qualitative)	Practice in preparing a report		Practice in working as a group
		By working on (and if applicable, assessed through)	Studying approaches to qualitative research including the critical appreciation of the strengths and weaknesses of a range of research methods (assessed by mini-research report)		Studying the formulation of research questions, proposals, sampling and research ethics (assessed by mini research report)		Studying qualitative analysis methods such as thematic, discourse, content analysis, narrative analysis, documentary analysis, bricolage, CAQDAS and walking a 'transect' (assessed by mini research report)	Mini qualitative research project report (summative assessment)		Practice sessions introducing students to some of the elementary issues involved in conducting qualitative research.

Stage 1	Field Project (HuGE & EEE)	Progress towards PLO	Develops knowledge, understanding and awareness	Practice in finding and using sources	Develops awareness of the importance of interdisciplinarity	Practice in primary data collection	Develops data handling and analysis skills (qualitative and quantitative)	Practice in verbal presentation	Develops awareness of environmental problems and their solutions	KPT in teamworking. Practice in working as a group
		By working on (and if applicable, assessed through)	Study topics covering urban, economic and social transformations within specific settlements for the mini-tasks, power point presentation and field report. Undertaking a flood control course with the Environment Agency and Yorkshire Water (summatively assessed by contribution mark)	Independent study: Identification and synthesis of information from field observations, academic and non-academic sources contributing towards all assessments and enhance knowledge and understanding of the fieldtrip locations through background reading prior to the fieldtrip (assessed in presentation)	Preparation for verbal presentation summative assessment and field report that involve literature search and reviewing articles that cut across human geography and environmental economics disciplines	Lecturer-defined projects- Qualitative and quantitative data collection in groups during the field trip (assessed through reflections, report and presentations)	Data handling, statistics: Analyses of data obtained during the fieldtrip (assessed in field report)	Written, reflection: Based on the pre defined themes for each day of the field trip, reflections on the daily observations are presented through a summary and write-up of field report. Oral: group presentation	Field observations of 'real world' socio-environmental problems	Training in working as a group as part of the flood control course. Working as a group in the field for data collection and verbal presentation and individually towards field report write up in other parts of the module. (assessed by contribution mark in flood control course)
Stage 2	Environmental Policy	Progress towards PLO	Develops knowledge, understanding and awareness	Develops skills in finding, using and discussing sources	Develops awareness of the importance of interdisciplinarity			Develops skills in oral communication	Develops awareness of environmental problems and their solutions, and provides experience in the critical evaluation of sustainable solutions	Develops team-working skills
		By working on (and if applicable, assessed through)	Engaging with a range of knowledge on human environmental interactions at multiple scales from global to local. Students will be able to engage critically with the concept of sustainable development. (assessed by exam)	Independent study and in-class discussions: Independent reading and data collection for seminar preparation and participation (assessed in presentation)	Engaging with literatures drawn from a range of disciplines including inter alia environmental studies, ecology, sociology, social studies and political science (assessed in exam)			Oral: Working with others to prepare oral presentation with audiovisual support (slides). Articulating position verbally in seminars and presentation and in exam.	Effective communication of ideas and complex solutions to multi-scalar environmental problems in seminar discussions and in exam.	Groupwork: Working in a team to prepare presentation for assessment.

Stage 2	Economics of Sustainable Development	Progress towards PLO	Develops knowledge, understanding and awareness	Develops skills in finding, using and discussing sources	Develops awareness of the importance of interdisciplinarity			Develops skills in oral and written communication	Develops awareness of environmental problems and their solutions, and provides experience in the critical evaluation of sustainable solutions	Develops team-working skills
		By working on (and if applicable, assessed through)	Studying <u>indicators of sustainability beyond GDP, the effects of international trade and economic globalisation on the environment, the role of international environmental agreements and the green economy</u> (assessed in essay)	Independent study and in-class discussions: Identify literature from a range of sources, including journal articles and government reports, and critically evaluate the information to create well balanced arguments during seminars and for the essay assessment	Engaging with topics from environmental, resource, and ecological economics as well as political science and management.			Written: Preparation of an argument-based essay assessment. Oral: participating in lectures by contributing with their opinion on the topics covered, and taking part in seminar discussions.	Coursework will test the ability of students to analyze a particular macroeconomic problem and its impacts on the environment. Students are required to critically evaluate the key implications of such economic issue including its ramifications in the social, political, and environmental agendas and suggest alternative policy options	Groupwork: Working as a team during seminars
Stage 2	Applied Economics for the Environment	Progress towards PLO	Develops knowledge, understanding and awareness	Develops skills in finding, using and discussing sources			Develops data handling and analysis skills	Develops skills in written communication	Develops awareness of environmental problems and the critical evaluation of their solutions	

		By working on (and if applicable, assessed through)	Preparation for seminars where key papers in environmental economics will be discussed (assessed in exam and coursework)	Independent study and in-class discussions: Preparation for seminars, coursework and exam that will apply economic thinking and analysis in looking at a range of environmental issues. Identify misleading uses of economic and social statistics.			Statistics: Use regression analysis and other multivariate statistics to examine relationships between variables of interest (assessed in coursework)	Coursework and exam that will test students ability to apply economic thinking and analysis in looking at a range of environmental issues	Coursework and exam that will test students ability to apply economic thinking and analysis in looking at a range of environmental issues	
Stage 2	Ocean Management and Conservation	Progress towards PLO	Develops knowledge, understanding and awareness	Practice in finding and using sources	Develops awareness of the importance of interdisciplinarity		Develops data handling and analysis skills		Develops awareness of environmental problems and their solutions	Develops team-working skills
		By working on (and if applicable, assessed through)	Lectures and practical on a wide range of topics of interest to ocean conservation and management (assessed by exam)	Independent study: Reading around the lectures (assessed in exam)	Discussing environmental management problems which are invariably interdisciplinary		Statistics: Practical requires data analysis and interpretation		Studying marine conservation and management approaches and issues (assessed by exam)	Groupwork: Lab practical offers opportunity for group work
Stage 2	Residential Field Course	Progress towards PLO	Develops knowledge, understanding and awareness		Develops awareness of the importance of interdisciplinarity	Develops skills in data collection and handling, and research project design	Develops data handling and analysis skills	Develops skills in oral and written communication	Develops awareness of environmental problems and their solutions	Practice in working as a group
		By working on (and if applicable, assessed through)	Day trips to sites in Tenerife to understand the ecology of the island; anthropogenic pressures and how the island is responding to these. Assessed by an exam.		Open exam questions which require students to draw upon wide range of information picked up through the week	Student-led research projects, groups: Two day group research project. Assessed by field notebook.	Statistics: Statistical analysis of data generated during the group project	Oral: Presentation of the group project to peers and lecturers; Written: keeping a field notebook	Studying anthropogenic pressures on an island environment and how it is responding to these (assessed in exam)	Groupwork: Working in a group of around six students to design and deliver a research project and present the results to their peers. Assessed by group presentation.
Stage 2	Geographical Information Systems	Progress towards PLO	Develops knowledge, understanding and awareness		Develops awareness of the importance of interdisciplinarity	Develops skills in data collection and handling, and research project design	Develops data handling and analysis skills	Develops skills in written communication		

		By working on (and if applicable, assessed through)	Undertaking a GIS project on one of three project topics (wind power; flood risk mapping; air pollution and health). Assessed in the scientific report.		Undertaking projects which call for the combination of physical science and socio-economic spatial dataset. Assessed in summative report.	Student-led project: There are many ways in which these multiple spatial datasets can be combined in carrying out the project allowing new insights and knowledge to be created. Assessed in summative report.	GIS, Statistics: Designing and performing GIS analysis of diverse spatial datasets and reporting results in a summative report. Encouragement is given to perform some statistical analysis beyond the GIS work.	Written: Reporting the project work in a summative scientific report.		
Stage 2	Energy and the Environment	Progress towards PLO	Develops knowledge, understanding and awareness	Practice in finding and using sources	Develops awareness of the importance of interdisciplinarity		Develops data handling and analysis skills	Develops skills in written communication	Develops awareness of environmental problems and critically evaluating their solutions	Develops team-working skills
		By working on (and if applicable, assessed through)	Gaining knowledge on technical, social and spatial dimensions of energy systems and how these interact with environmental parameters ; students also gain knowledge and experience of some of the key methodologies used in managing and protecting the environment . (assessed by exam)	Independent study: The summative coursework essay requires selection of a target country and then detailed research and analysis of country-specific energy issues and policies to determine the extent to which environmental problems influence energy policy.	Studying energy as a socio-technical system. The summative coursework essay in particular requires understanding and expression of energy as a socio-technical system.		Secondary data handling: The summative coursework essay requires analysis of country-specific energy issues and policies to determine the extent to which environmental problems influence energy policy.	Written: Preparation of argument-based summative essay	Undertaking problem-based tasks in groups across five practical sessions exploring EIA, SEA, carbon policy, energy futures, community engagement . Assessed by summative essay and exam.	Groupwork: Working as a group on problem-based tasks across five practical sessions (EIA, SEA, carbon policy, energy futures, community engagement)
Stage 2	Food, Space, Culture and Society	Progress towards PLO	Develops knowledge, understanding and awareness	Practice in finding and using sources	Develops awareness of the importance of interdisciplinarity			Develops skills in oral and written communication	Develops awareness of environmental problems and critically evaluating their solutions	Develops team-working skills

		By working on (and if applicable, assessed through)	Background research preparing for seminar sessions, an summative coursework and exam on topics related to <u>sustainable food production and consumption.</u>	Independent study and in-class discussions: Identifying literature from a range of academic sources and synthesise the information in a coherent form to be used during seminar sessions and in summative coursework and exam	Preparation for seminars, and summative coursework and exam that involve literature search and reviewing articles across economic, social and environmental geographies to critique discourses on sustainable food consumption debates.			Oral, written: Articulating ideas, principles and theories effectively and fluently verbally in presentations and discussions and in writing in summative essays and exam	Summative essay that examines the roles of society, policy and governance, in shaping and facilitating a move towards a ecologically, economically and socially sustainable food system	Groupwork: Working individually and as groups during seminar presentations
Stage 2	Climate Change: Science, Observation and Impacts	Progress towards PLO	Develops knowledge, understanding and awareness	Practice in finding and using sources	Develops awareness of the importance of interdisciplinarity	Develops skills in data collection and handling, and research project design	Develops skills in scientific modelling	Develops skills in written communication	Develops awareness of environmental problems and their solutions, and provides experience in designing sustainable solutions	Practice in working as a group
		By working on (and if applicable, assessed through)	Studying the <u>public perception, best evidence of impacts, mitigation and adaptations to climate change including recommendations for future emissions reductions in carbon.</u>	Independent study: Scientific report is an independent piece of work that involves obtaining, synthesising and critically evaluating complex information on climate change from a wide range of reliable sources	Media seminar which involves students thinking about something other than the science of climate change and how the need to sell papers affects reporting. The scientific report involves working across disciplinary boundaries. As well as considering the scientific aspects behind climate change, students also consider the social, political and economic aspects.	Student-led research projects, groups: For a scientific report, students plan, design and execute research as an individual to address climate change using modelling software	Modelling: For a report, they use quantitative data to make recommendations for emissions control in the future. This includes carrying out a set of model runs where it is possible to generate large amounts of data, so critical evaluation of the results to provide a coherent report is key.	Written: effectively communicating knowledge, complex ideas and persuasive arguments for a summative written report. Design and write an eye-catching yet scientifically informative summative newspaper article on climate change.	A report recommending sustainable solutions to climate change considering the broader social, political and environmental contexts, and the ethical implications of their application by applying knowledge, theories and approaches from the module and wider degree	Groupwork: Work responsibly as part of a team or as a team-leader to design and write an eye catching yet scientifically informing newspaper article on climate change

LOs and providing opportunities to practice skills taught in KPT training.

Stage 2	Ecosystem Processes	Progress towards PLO	Develops knowledge, understanding and awareness	Practice in finding and using sources	Develops awareness of the importance of interdisciplinarity	Develops skills in data collection and handling, and research project design	Develops data handling and analysis skills and experience in performing scientific calculations	Develops skills in written and oral communication	Develops awareness of environmental problems and their solutions	Develops team-working skills
		By working on (and if applicable, assessed through)	Preparation of lectures, seminars, practicals (and reports) and exam on key ecosystem processes involving microbes, plants and soils , and their responses to human activities. Assessed by exam and scientific reports.	Independent study and in-class discussions: Literature search for summative lab reports and seminars on microbial, soil and plant ecology	Seminar preparation and discussions on current ecological topics	Student-led research projects, groups: Design of research carried out in field/lab practicals on environmental control of microbial and plant growth (group work). Assessed by scientific reports.	Calculations: various key plant and soil variables, microbial growth rate. Statistics: Descriptive and inferential statistical analysis of data sets collected in field and lab using Excel and SPSS. Assessed in summative scientific reports.	Written: Write-up of research results as summative scientific reports; Oral: Seminar discussions and presentation	Designing and undertaking field /laboratory experiments on impacts of land use change and propose management recommendations to improve plant community development. Assessed in summative scientific report on controls on plant growth.	Group work: lab practicals and seminars
Stage 2	Megacities and Urbanisation	Progress towards PLO	Develops knowledge, understanding and awareness	Develops skills in finding, using and discussing sources	Develops awareness of the importance of interdisciplinarity			Develops skills in oral and written communication	Develops awareness of environmental problems and their solutions, and provides experience in the critical evaluation and design of sustainable solutions	Develops team-working skills
		By working on (and if applicable, assessed through)	Studying topics related to key themes, concepts and debates characterising historical and contemporary urban geography. (Assessed in an exam)	Independent study and in-class discussions: Identifying literature from a range of academic sources and synthesise the information in a coherent form to be used during seminar sessions and in coursework and exam	Preparation for seminars, coursework and exam that involve literature search and reviewing articles across social justice and equity, social and environmental sustainability, management of urban areas, regeneration policies and ecological futures.			Oral, written: Eloquently presenting ideas and theories in verbal presentations and discussions and in writing in essays and exam	Coursework that examines the issues confronted by people living in cities including poor shelter, environmental pollution and degradation, and inequalities in access to urban goods and services	Groupwork: Working individually and as groups during seminar presentations

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Stage 2	Sustainable Tourism and Transport	Progress towards PLO	Develops knowledge, understanding and awareness	Develops skills in finding, using and discussing sources	Develops awareness of the importance of interdisciplinarity	Develops skills in data collection and handling, and research project design	Develops data handling and analysis skills	Develops skills in oral and written communication	Develops awareness of environmental problems and their solutions, and experience in the critical evaluation and development of sustainable solutions	Develops team-working skills
		By working on (and if applicable, assessed through)	Background research ahead of seminar preparation, write-up of report on the topic exploring <u>opportunities for sustainable transportation and issues within the tourism industry</u>	Independent study and in-class discussions: Identifying literature from a range of academic sources and synthesise the information to be used during seminar sessions and in the construction of a summative assessment report	Preparation for seminars and assessed report writing that involve literature search and reviewing articles across different areas of geography (economic, social, environmental and transport) to critique discourses on sustainable transportation and tourism debates.	Student-led group projects: Constructing individual report on strategies to achieving sustainable transportation and tourism scenarios.	Data handling and statistics: Analysis of a range of qualitative and quantitative data	Oral, written: Presenting concepts, ideas and theories effectively and fluently in the verbal presentation and seminar sessions and in the courseworks	Seminar discussion topics which are structured to encourage problem based learning. Sustainable transport and tourism problems are set and solutions for which are discussed during the seminar sessions	Groupwork: Working individually and as groups during seminar presentations
Stage 2	Geographies of Development	Progress towards PLO	Develops knowledge, understanding and awareness	Develops skills in finding, using and discussing sources	Develops awareness of the importance of interdisciplinarity			Develops skills in written communication	Develops awareness of environmental problems and their solutions	Develops team-working skills
		By working on (and if applicable, assessed through)	Background research preparing for seminar sessions and coursework on <u>diverse theories, concepts and critiques of development and inequality from a global perspective</u>	Independent study and in-class discussions: Identifying literature from a range of academic sources and synthesise the information to be used during seminar sessions and courseworks.	Preparation for seminars and courseworks that involve literature search and reviewing articles across different strands of development (Sustainable development, globalisation and regionalism, creation and distribution of wealth, cultures and trends in society)			Written: Articulating ideas, concepts and theories effectively and fluently in seminar sessions and in the writing of a summative report	Coursework that examines various policy approaches from the macro-level of international development agencies to the micro level of grassroots organisations.	Groupwork: Working individually and as groups during seminar presentations
Stage 2	Environmental Ecology	Progress towards PLO	Develops knowledge, understanding and awareness	Develops skills in finding, using and discussing sources	Develops awareness of the importance of interdisciplinarity			Develops skills in oral communication	Develops awareness of environmental problems and the critical evaluation of their solutions	Develops team-working skills

		By working on (and if applicable, assessed through)	Studying key contemporary environmental issues, largely focussing on global environmental change (GEC) . Assessed by exam.	Independent study and in-class discussions: preparation for seminars on global environmental change	Studying Global Environmental Change problems which are interdisciplinary.			Oral: seminar discussions on global environmental change	Studying the development of the ecosystem approach, leading to the concepts of "ecosystem services" and exploring geoengineering solutions and their ramifications. Assessed by exam.	Groupwork: seminar discussions
Stage 3	3rd Year Research Project	Progress towards PLO	Develops knowledge, understanding and awareness	Practice in finding and using sources	Develops awareness of the importance of interdisciplinarity	Develops skills in data collection and handling, and research project design	Develops data handling and analysis skills	Develops skills in written communication	Develops awareness of environmental problems and their solutions, and provides experience in designing sustainable solutions	Develops team-working skills
		By working on (and if applicable, assessed through)	Undertaking in depth research on a specific environment, economics and ecology topic. Assessed in dissertation.	Independent study and discussions with supervisor: independent research for dissertation project design and the interpretation of the findings. Assessed in dissertation.	Designing and undertaking an environmental economics dissertation. Project design and implementation assessed by scientific report.	Independent research design: Independently design and undertake a field or laboratory study on a specific topic in environment, economics and ecology geography. Project design and implementation assessed by dissertation.	Statistics: Independently design and undertake analysis of dissertation data. Assessed by dissertation.	Written: preparing a dissertation to present independent research findings. Report structuring, language and text assessed by dissertation.	Investigating how the environment functions and how problems can be avoided or mitigated. Assessed by dissertation.	Teamwork: working with data providers and field/laboratory coworkers to collect dissertation data.
Stage 3	Environmental and Natural Resource Economics	Progress towards PLO	Develops knowledge, understanding and awareness	Develops skills in finding, using and discussing sources	Develops awareness of the importance of interdisciplinarity	Develops skills in data collection and handling, and research project design	Develops data handling and analysis, and mathematical modelling skills	Develops skills in oral and written communication	Develops awareness of environmental problems and their solutions, and experience in the critical evaluation and design of sustainable solutions	Develops team-working skills

		By working on (and if applicable, assessed through)	Module focuses on <u>market failures (public goods, public bads and externalities), market-based instruments to regulate individuals and firms in relation to climate change and biodiversity conservation, natural resource management (fisheries and forests), and measuring environmental values and benefits</u> (assessed in an exam)	Independent study and in-class discussions: reading for seminars and more widely to prepare coursework and exam	Seminars, computer practicals are framed to explore disciplinary linkages in assessing environmental management and conservation, using natural and social data.	Coursework involves executing an empirical model exercise on natural resource management project to inform decision-makers	Statistics and mathematical modelling: practicals and problem-solving exercises	Oral: participating in seminars articulating ideas and theories confidently in groups Written: coursework preparation, and numerical-analysis reports based on computer practical work (with appropriate use of graphs and figures using relevant software).	Computer practicals to assess fisheries and forests environmental management, and seminars on incentives to pollution control	Groupwork: seminars on problem-solving and discussing questions.	
Stage 3	Biodiversity and Society	Progress towards PLO	Develops knowledge, understanding and awareness	Practice in finding and using sources	Develops awareness of the importance of interdisciplinarity	Develops skills in data collection and handling	Develops data handling and analysis skills	Develops skills in oral and visual communication		Develops team-working skills	
		By working on (and if applicable, assessed through)	<u>Studying links between biodiversity and society. Assessed by exam.</u>	Independent study and in-class discussions: reading for seminar discussions. Identification of relevant sources to support class presentation. Reading more widely around topics to support lectures and prepare for exam.	Integrating data from ecology and social sciences to better understand and manage the natural environment. Assessed by exam.	Lecturer-led practical: collecting survey data during a field practical	Statistics: practical on analysis of social sciences data.	Seminar on science communication. Digital, visual: practical on using and creating videos for summatively assessed science communication in a written article or video; Oral: class presentations on wider reading, participation in seminars		Groupwork: Working in a team to prepare material for class presentations on wider reading. Data collection practical in small groups.	
Stage 3	Atmosphere and Ocean Science	Progress towards PLO	Develops knowledge, understanding and awareness	Practice in finding and using sources	Develops awareness of the importance of interdisciplinarity		Develops skills in scientific modelling, and experience in performing scientific calculations	Develops skills in oral and visual communication	Develops awareness of environmental problems and their solutions	Develops team-working skills	kills taught

		By working on (and if applicable, assessed through)	Studying the <u>science of the oceans an the atmosphere, how they interact and are altered by human activities</u> . Assessed by exam and in summative oral assessment.	Independent study and in-class discussions: Independent reading for seminar discussions and to support lectures and prepare for exam. Independent research task set at the end of each lecture. Assessed in oral presentation and exam.	Studying atmospheric and ocean science and the boundaries between them. Also discussing aspects of chemistry, physics and biology. Trip to City of York Council Air Quality Unit gives students experience of working at the coal face and applying the theory learnt in lectures. Assessed in summative oral presentation and exam.		Calculations: Examples classes for both the ocean and atmospheric science aspects; Modelling: PC practical on clean and polluted air.	Oral: Discussion in groups during seminars, oral presentation of work in coursework assessment; Visual, digital: Students plan a demonstration of a physical oceanography concept after consideration of relevant theory and then document the process through a short film or photographs, which form the basis of a presentation.	PC practical on clean and polluted air.	Groupwork: Working in a team to prepare material for coursework presentation.
Stage 3	Environmental Hazards	Progress towards PLO	Develops knowledge, understanding and awareness	Develops skills in finding and using sources	Develops awareness of the importance of interdisciplinarity		Develops data handling and analysis skills	Develops skills in written communication		
		By working on (and if applicable, assessed through)	Studying the <u>physical processes behind natural hazards</u>	Independent study: Independent work for coursework	Considering societal impacts of mitigation strategies and perceptions of hazard risk, including in popular media		Statistics: Analysis of data to examine flooding risk	Written: Writing a technical report		
Stage 3	Land Use Change and Management	Progress towards PLO	Develops knowledge, understanding and awareness	Practice in finding and using sources	Develops awareness of the importance of interdisciplinarity		Develops data handling and analysis skills	Develops skills in written communication	Develops awareness of environmental problems and their solutions, and provides experience in designing sustainable solutions	Develops team-working skills
		By working on (and if applicable, assessed through)	Independent background research and field observation on <u>patterns and process of forests and agricultural settings and in preparation of a summatively assessed Landuse Management Plan.</u>	Independent study: Independent background research and field observation on pattern and process of temperate ecosystems. Assessed by summative landuse management plan.	Bringing together a range of information from different fields (ecology, management, geographical sciences) in designing a summative Landuse Management Plan		Statistics: Analysis of collected experimental data	Written: Preparation of a summative scientific report assessment	Designing a summative Land Use Management Plan	Groupwork: Working in large groups to carry out field-based practicals. Also small team work within role play seminars

mediate and aware and Interdisciplinary thinker PLOs and providing opportunities to practice skills in KPT training.

Stage 3	Environmental Politics	Progress towards PLO	Develops knowledge, understanding and awareness	Practice in finding and using sources	Develops awareness of the importance of interdisciplinarity			Develops skills in oral and written communication	Develops awareness of environmental problems and their solutions	Develops team-working skills
		By working on (and if applicable, assessed through)	Covering literatures from green political theory, environmental policy and environmental politics . Assessed by essay.	Independent study and in-class discussions: Independent work for seminar preparation, discussion and essay. Students work on understanding and dissecting a range of texts for seminars and within assessed essay.	Reviewing and enagaging with literatures from green political theory, environmental policy and environmental politics for seminars and in essays.			Oral: Presenting findings from readings to small group within seminars and to whole larger seminar group. Written: Effectively communicating arguments in writing via assessed essay.	Studying green political theory, environmental policy and environmental politics . Assessed by essay.	Groupwork: Enagaging in small group work on a weekly basis in seminars.

Optional modules contributing to Know
