

Module Overview			
Module Title	Managing Global Soils in a Changing Climate		
Module Code	4727	Module Type	Taught Module
School	School of Agriculture, Food and the Environment		
Module Leader	Felicity Crotty		
Location	Cirencester	Semester	Semester 2 (RAU)
FHEQ Level	Level 7	Credits	15 credits
QAA Subject Benchmark Statement	No relevant statement		
Module Description			
<p>The module will equip the student with the knowledge and skills required to help with tackling two key challenges facing humanity: climate change and soil degradation leading to food insecurity. The module starts by tackling the issue of degraded soils and highlighting potential solutions to restore soils back to health. The key soil processes are discussed with particular emphasis on the role of soil biodiversity. The risks posed by climate change to soils in many parts of the world are discussed with a particular focus on water scarcity. Possible adaptation solutions aimed at the long-term sustainable use of soils in the context of climate change are discussed.</p>			
Intended Learning Outcomes			
ILO1	Critically appraise and propose sustainable solutions and priorities for soil management in the face of uncertainties.		
ILO2	Based on the latest, sometimes conflicting evidence, analyse the potential for global soils to sequester carbon and thus mitigate climate change.		
ILO3	Evaluate how the management of soils can help agriculture adapt to the risks and unpredictability of climate change, whilst providing more immediate benefits to soil sustainability.		
Learning, Teaching and Assessment			
Approach to Learning and Teaching			
<p>This module includes lectures and seminars. Each week focusses on a particular topic, which is first introduced in the online lecture and discussed in the seminar. The associated weekly seminar then focusses on a key aspect of the topic in more</p>			

detail and will generally be student-led, with group tasks, discussions and activities (e.g. presentations).									
Approach to Assessment									
A single element of assessment will be required in the form of a report up to 3000 words. The essay format allows the student to argue a case bringing in relevant information from both the module contents and reading around the topic. It is the perfect means of testing critical analysis and argumentation building including dealing with uncertainty and complexity.									
Scheduled Learning and Teaching Hours (seminars)				24					
Scheduled Learning and Teaching Hours (field-based)				0					
Scheduled Learning and Teaching Hours (lab-based)				0					
Scheduled Learning and Teaching Hours (computer-based)				0					
Scheduled Learning and Teaching Hours (online learning)				12					
Independent Study Hours				114					
Placement Learning Hours				0					
Total Study Hours				150					
Assessment Components									
Component	Type	Weight	Acc' Req?	Submission Week	ILOs Assessed				
					1	2	3	4	5
Essay (3000 words)	Coursework	100%	<input type="checkbox"/>	Week 35	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Associated Programmes									
Programme Title				Designation					
MSc Sustainable Agriculture and Food Security				Core					
MSc Agricultural Technology and Innovation				Optional					
Resources									
Reading list	https://rau.rl.talis.com/index.html								