



ACADEMIC SERVICES

MODULE SPECIFICATION

Part 1: Basic Data					
Module Title	Research with Impact				
Module Code	USSKM5-30-M	Level	M	Version	1
Owning Faculty	Health and Applied Sciences	Field	Applied Sciences		
Department	Department of Applied Sciences				
Contributes towards	MSci Biological Sciences; MSci Environmental Science; MSci Wildlife, Ecology and Conservation Science; MSci Biomedical Science.				
UWE Credit Rating	30	ECTS Credit Rating	15	Module Type	Standard
Pre-requisites	USSK5K-30-3 Research Experimental Project; USSKBC-30-3 Research dissertation Project		Co- requisites	None	
Excluded Combinations	None		Module Entry requirements	None	
Valid From	September 2016		Valid to	September 2022	

CAP Approval Date	May 2016
--------------------------	----------

Part 2: Learning and Teaching	
Learning Outcomes	<p>On successful completion of this module students will be able to:</p> <ul style="list-style-type: none"> • Demonstrate an in-depth understanding of the importance of academic and research integrity (B1). • Construct reasoned arguments to support their position on the ethical and social and economic impact of advances in their field of interest (B2). • Analyse, synthesise and summarise information critically from a variety of sources (A1, A2, B1, B2). • Communicate about their subject appropriately to a variety of audiences using a range of formats and approaches and employing appropriate scientific language (B2, A1, A2). • Use the internet and other electronic sources critically as a means of communication and a source of information (B2). • Evaluate performance of self and others through reflective practice and observation (B1).
Syllabus Outline	<ul style="list-style-type: none"> • The principal themes within the module are those of research impact, research governance and science communication. • Research impact: students will develop an understanding of ‘research impact’ in the context of the Research Councils UK (RCUK) definition; ‘the demonstrable contribution that excellent research makes to society and the economy’. • Research governance: students will develop a detailed understanding of the importance of the research governance process incorporating consideration of the ethics of scientific research, research integrity, project planning, experimental design and evaluating the risks associated to workers and the

	<p>wider community of undertaking scientific research.</p> <ul style="list-style-type: none"> • The scientific literature: students coming through 3 years of a BSc (Hons) Programme will have substantial experience of literature searching. This aspect of the syllabus will focus on developing an awareness of the integrity and quality of sources of information and on evaluating the quality and using the literature to engage in intellectual argument. Students will gain experience of the use of relevant reference management software, and appropriate strategies for literature searching. • Analytical and data interpretation skills: students will develop an understanding of the importance of appropriate data analysis, the correct analysis tools to apply to particular data and the value of interpreting their data in the context of the published literature in order to demonstrate impact. • Science communication: students will develop an understanding of the importance of effective science communication in achieving research impact and develop skills in and an appreciation of the value of communicating their research effectively to both specialists in their field and to a wider audience. • Public engagement: students will develop an understanding of the importance of engaging the public in the context of communicating science, addressing misconceptions and inspiring future scientists.
Contact Hours	<ul style="list-style-type: none"> • Scheduled contact time will comprise: • 22 x 3 hour lecturials. • 3 x 2 hour oral assessment sessions.
Teaching and Learning Methods	<ul style="list-style-type: none"> • Scheduled learning is by a structured programme of lectures, and tutorial sessions. Lectures are designed to deliver specialist subject knowledge along with an overview of the topic and relevant context. • Tutorial sessions will engage students in discussion and debate around the lecture material allowing students to recognise and respect the views of others, develop negotiating skills and appreciate the validity of differing points of view, including reflective practice. • Student learning will be supported through the University Online Learning Environment (OLE; Blackboard) through provision of/direction to appropriate peer-reviewed publications to guide independent study. The OLE will be utilised to direct learners to relevant online resources and will be the vehicle for completion of assessments B1 and B2. • Students are expected to undertake 72 hours of scheduled learning and 228 hours of independent learning <p>Scheduled learning includes lectures and tutorials.</p> <p>Independent learning includes hours engaged with essential reading and assignment preparation.</p>
Key Information Sets Information	<p>Key Information Sets (KIS) are produced at programme level for all programmes that this module contributes to, which is a requirement set by HESA/HEFCE. KIS are comparable sets of standardised information about undergraduate courses allowing prospective students to compare and contrast between programmes they are interested in applying for.</p>

Key Information Set - Module data				
Number of credits for this module				30
Hours to be allocated	Scheduled learning and teaching study hours	Independent study hours	Placement study hours	Allocated Hours
300	72	228	0	300

The table below indicates as a percentage the total assessment of the module which constitutes a -

Written Exam: Unseen written exam, open book written exam, In-class test

Coursework: Written assignment or essay, report, dissertation, portfolio, project

Practical Exam: Oral Assessment and/or presentation, practical skills assessment, practical exam

Please note that this is the total of various types of assessment and will not necessarily reflect the component and module weightings in the Assessment section of this module description:

Total assessment of the module:	
Written exam assessment percentage	0%
Coursework assessment percentage	100%
Practical exam assessment percentage	0%
	100%

Reading Strategy

All students will be encouraged to make full use of the print and electronic resources available to them through membership of the University. These include a range of electronic journals and a wide variety of resources available through web sites and information gateways. The University Library's web pages provide access to subject relevant resources and services, and to the library catalogue. Many resources can be accessed remotely. Students will be presented with opportunities within the curriculum to develop their information retrieval and evaluation skills in order to identify such resources effectively.

This guidance will be available either in the module handbook, via the module information on Blackboard or through any other vehicle deemed appropriate by the module/programme leaders.

Indicative Reading List

Stewart, C.N. (2011) *Research Ethics For Scientists: A Companion For Students*. : John Wiley & Sons, Ltd.

Glass, D.J. (2014) *Experimental Design for Biologists*. 2nd ed. New York, USA: Cold Spring Harbour Laboratory Press.

Currell, G. and Dowman, A. (2009) *Essential Mathematics and Statistics For Science*. 2nd ed. : John Wiley & Sons, Ltd.

Bowater, L. and Yeoman, K. (2012) *Science Communication: A Practical Guide for Scientists*. : Wiley-Blackwell.

Assessment Strategy	<ul style="list-style-type: none"> • Component A will comprise two elements; an oral presentation under controlled conditions, on a topical or controversial topic in the student's field of interest, and a written handout/flyer to accompany the presentation. • Component A is an evaluation of the impact of recent scientific developments in the student's field of choice, in terms of their social, economic and ethical impact. • Component B will comprise two elements; a research skills portfolio and a scientific blog. • The research skills portfolio will comprise evidence of competencies including literature review, project planning, research ethics, experimental design and data handling). Students will also have to evidence communication to the wider public via a public engagement/outreach activity. A self-reflection and evaluation of the student's own performance will be included. • The scientific blog will assess the student's ability to write for a wider audience, as well as their ability to respond to diverse and potentially challenging arguments in a reasoned and authoritative manner; this will be presented as a written assignment for the resit opportunity due to the duration of the resit coursework period.
---------------------	--

Identify final assessment component and element	B1	
% weighting between components A and B (Standard modules only)	A: 40	B: 60
First Sit		
Component A (controlled conditions) Description of each element	Element weighting (as % of component)	
1. 30 minute (in-class) oral presentation.	60	
2. "Handout" to accompany oral presentation.	40	
Component B Description of each element	Element weighting (as % of component)	
1. Skills portfolio.	60	
2. Scientific blog.	40	

Resit (further attendance at taught classes is not required)		
Component A (controlled conditions) Description of each element	Element weighting (as % of component)	
1. Oral presentation.	60	
2. "Handout" to accompany oral presentation.	40	
Component B Description of each element	Element weighting (as % of component)	
1. Skills portfolio.	60	
2. Written assignment.	40	
<p>If a student is permitted an EXCEPTIONAL RETAKE of the module the assessment will be that indicated by the Module Description at the time that retake commences.</p>		

