University of the West of England
BRISTOL

ACADEMIC SERVICES

MODULE SPECIFICATION

Part 1: Basic Data						
Module Title	Wildlife Forensics					
Module Code	USSKM9-15-M		Level	M	Version	1
Owning Faculty	Health and Applied Sciences		Field	Department of Applied Sciences.		
Department	Applied Sciences					
Contributes towards	MSci Forensic Science					
UWE Credit Rating	15	ECTS Credit Rating	7.5	Module Type	Standard	
Pre-requisites	None		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	On successful completion of this module students will be able to: • Critically evaluate the realised and potential role of animals, plants and fungi in forensic investigation (Component B; Component A). • Analyse forensic evidence originating from wildlife crime in the laboratory, using a range of advanced analytical and microscopic techniques. (Understanding demonstrated in Component A and B). • Appraise the scale and nature of international and national wildlife crime and links to other types of serious crime (Component A). • Evaluate the drivers for national and international wildlife crime and how this informs strategies for prevention and prosecution. (Component A) • Critically evaluate the contribution of forensic science, legislation and community-based initiatives in the prevention and prosecution of wildlife crime and also in 'damage limitation'. (Component A).
Syllabus Outline	**Forensic Ecology** The potential and realised contribution of animals, plants, fungi and their derivatives in investigating serious crimes such as rape, murder and serious pollution events. **UK Wildlife Crime** Current priorities of the National Wildlife Crime Unit: Raptor persecution, badger persecution, bat persecution, poaching. Drivers of these crimes and legislation used to prevent and prosecute them. The use of morphological examinations and biological and chemical analyses in these investigations. **International Wildlife Crime**

	The illegal pet trade including trade in primates, birds and tortoises. The illegal trade in animal parts for food, 'medicine' and ornamental artefacts including ivory, rhino horn, reptile skin, shark fins, bush meat, dolphin meat and tiger and bear derivatives. Drivers for international wildlife crime and the role of CITES, community initiatives and international organisations in combating wildlife crime. The use of morphological examinations and biological and chemical analyses in these investigations. **Transferable Skills** Development of skills in the chemical and biological analysis and morphological examination have broad, beyond subject applications. Critical evaluation of scientific literature. Data analysis and presentation. Engagement with current issues in Wildlife Forensics.
Contact Hours	This module will run in semester 2. Students will have a 3 hour session each week which will be an integrated mixture of lectures, practical classes and tutorial style activities.
Teaching and Learning Methods	**Scheduled Learning** The theoretical underpinning of the module is delivered through an online lecture series and a series of laboratory practical classes. Students are supported in their learning at timetabled bi-weekly tutorial sessions. **Independent Learning** It is additionally expected that students will spend a significant proportion of the study time for this module engaging with relevant scientific literature, as directed by academic staff. It is expected that independent study will take students to the notional 150 hours of study associated with this module.
Key Information Sets Information	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. **Key Information Set - Module data** *Number of credits for this module* 15 Hours to be allocated: 150 — Scheduled learning and teaching study hours: 36 — Independent study hours: 114 — Placement study hours: 0 — Allocated Hours: 150 The table below indicates as a percentage the total assessment of the module which constitutes a - **Written Exam**: Unseen written exam. **Coursework**: Practical portfolio.

	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 50% Coursework assessment percentage 50% 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. Any **essential reading** will be indicated clearly, along with the method for accessing it, e.g. students may be expected to purchase a set text, be given or sold a print study pack or be referred to texts that are available electronically, etc. 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. If **further reading** is expected, this will be indicated clearly. If specific texts are listed, a clear indication will be given regarding how to access them and, if appropriate, students will be given guidance on how to identify relevant sources for themselves, e.g. through use of bibliographical databases.
Indicative Reading List	The following texts are particularly recommended: • Byrd, J. (2009) *Forensic Entomology: The utility of arthropods in legal investigations*. CRC Press. • Cooper, J.E. and Cooper, M.E. (2013) *Wildlife Forensic Investigation.* CRC Press. • Coyle, H.M. (2004) *Forensic Botany: Principles and applications to criminal casework*. CRC Press. • Gennard, D. (2012) *Forensic Entomology: An Introduction* (2nd edition). Wiley-Blackwell. • Hall, D., Byrd, J. (2012) *Forensic Botany: A Practical Guide.* Wiley-Blackwell. • Huffman, J.E., Wallace, J.R. (2011) *Wildlife Forensics: Methods and Applications*. Wiley-Blackwell. • Meier-Augenstein, W. (2010) *Stable Isotope Forensics: An introduction to the Forensic Application of Stable Isotope Analysis.* Wiley-Blackwell. **Journals** Assessments in this module will require students to engage with current research in wildlife forensics and the way that this is presented in scientific journals. Students have access to a huge range of electronic journals free through membership of the university library. Of particular relevance to this module are *Science and Justice, Forensic Science International and Journal of Forensic Sciences.* These and others

	can be accessed via the e-journals A-Z list on the library website. Journal articles of relevance to a particular lecture will be indicated by the academic leading the session.

Part 3: Assessment	
Assessment Strategy	**Coursework (50%)** Forensic Palynology and Entomology case study. An assignment based on the processing and critical evaluation of palynological and entomological evidence from an outdoor body site, in order to determine key facts relating to the case e.g. characteristics of previous locations of the victim, minimum post-mortem interval. Students will be introduced to the coursework including the detailed marking scheme, when they encounter these evidence types during the taught sessions. **Examination: 1.5 hours (50%)** The controlled component is a written exam. The exams will be 1.5 hours duration, which is consistent with the Department's assessment strategy for Level M modules. This assessment will provide students with an opportunity to demonstrate both their knowledge on a broad range of topics through a selection of essay questions. This assessment will test a range of the learning outcomes and will provide a valuable learning experience through critical evaluation and demonstrating knowledge.

Identify final assessment component and element	**Component A**	
% weighting between components A and B (Standard modules only)	**A:** **50%**	**B**: **50%**

First Sit	
Component A (controlled conditions) **Description of each element**	**Element weighting** **(as % of component)**
1. 1.5 hour examination	100%
Component B **Description of each element**	**Element weighting** **(as % of component)**
1. Palynology and Entomology Case Study (2500 words)	100%

Resit (further attendance at taught classes is not required)	
Component A (controlled conditions) **Description of each element**	**Element weighting** **(as % of component)**
1. 1.5 hour examination	100%
Component B **Description of each element**	**Element weighting** **(as % of component)**
Palynology and Entomology Case Study (2500 words)	100%
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.	