Module Descriptor

Title	Entomology & Parasitology		
Session	2026/27	**Status**	Published
Code	BIOL09013	**SCQF Level**	9
Credit Points	20	**ECTS (European Credit Transfer Scheme)**	10
School	**Health and Life Sciences**		
Module Co-ordinator	Richard Thacker		

Summary of Module

This module is concerned with interactions between invertebrate species and mankind. The specific emphasis in the module is on species that are inimical to mankind as crop pests, vectors of disease and/or species that cause disease in their own right. The module is split equally between considerations of entomology and parasitology. Entomological studies begin with a review of insect biodiversity and then look in detail at insect feeding, insect growth and development and insect ecological characteristics. Human attempts to manage or control insect pest species are then considered including chemical control, biological control and genetic methods. The focus in parasitology is on diseases caused by bacteria, protozoa, trematodes and cestodes. Biological characteristics of parasites and clinical diagnosis of disease are considered along with approaches to the treatment of disease. The module is taught using a blend of lectures, tutorials and laboratory practical experiments. The module specifically develops the UWS graduate attributes that are associated with critical thinking, analysis, and becoming research minded.

Develop a knowledge of the diversity of insect species.

Understand the different approaches to managing pest species.

Develop a knowledge of major diseases caused by parasites.

Understand the approaches to the treatment of parasitic diseases.

Module Delivery Method	**On-Campus[1]**	**Hybrid[2]**	**Online[3]**	**Work -Based Learning[4]**
	☒	☐	☐	

[1] Where contact hours are synchronous/ live and take place fully on campus. Campus-based learning is focused on providing an interactive learning experience supported by a range of digitally-enabled asynchronous learning opportunities including learning materials, resources, and opportunities provided via the virtual learning environment. On-campus contact hours will be clearly articulated to students.

[2] The module includes a combination of synchronous/ live on-campus and online learning events. These will be supported by a range of digitally-enabled asynchronous learning opportunities including learning materials, resources, and opportunities provided via the virtual learning environment. On-campus and online contact hours will be clearly articulated to students.

[3] Where all learning is solely delivered by web-based or internet-based technologies and the participants can engage in all learning activities through these means. All required contact hours will be clearly articulated to students.

[4] Learning activities where the main location for the learning experience is in the workplace. All required contact hours, whether online or on campus, will be clearly articulated to students

						☐
Campuses for Module Delivery	☐ Ayr ☐ Dumfries		☒ Lanarkshire ☐ London ☐ Paisley		☐ Online / Distance Learning ☐ Other (specify)	
Terms for Module Delivery	Term 1	☒	Term 2	☐	Term 3	☐
Long-thin Delivery over more than one Term	Term 1 – Term 2	☐	Term 2 – Term 3	☐	Term 3 – Term 1	☐

Learning Outcomes	
L1	Describe the range of insect biodiversity, insect growth and development, insect feeding and basic ecological characteristics of species using the r-K continuum.
L2	Identify and discuss the main interactions between insects and mankind and attempts to minimize their inimical impacts using various control methods (chemical, biological, genetic).
L3	Outline protozoan and helminth life cycles and how parasite metabolism adapts to survive in different hosts.
L4	Describe the interactions of protozoan and helminth organisms with mankind, particularly in relation to disease and in relation to clinical features associated with diseases caused by these organisms.
L5	Describe the concept of One Health as it relates to disease.

Employability Skills and Personal Development Planning (PDP) Skills	
SCQF Headings	**During completion of this module, there will be an opportunity to achieve core skills in:**
Knowledge and Understanding (K and U)	**SCQF 9** Describe the interactions of protozoan and helminth organisms with mankind, particularly in relation to disease and in relation to clinical features associated with diseases caused by these organisms.
Practice: Applied Knowledge and Understanding	**SCQF 9** Use and/or describe some of the techniques that are utilized to minimize the impacts of invertebrate species on mankind.
Generic Cognitive skills	**SCQF 9** Identify and analyse problems caused by invertebrates and describe basic approaches to the amelioration of these problems.
Communication, ICT and Numeracy Skills	**SCQF 9** Interpret and evaluate numerical data using basic statistical techniques and present the results of such evaluation in graphical and written reports.
Autonomy, Accountability and Working with Others	**SCQF 9** Exercise autonomy and initiative and work with others when undertaking practical laboratory work associated with the identification and management of invertebrate pest species.

Prerequisites	Module Code	Module Title
	Other	
Co-requisites	Module Code	Module Title

Learning and Teaching	
In line with current learning and teaching principles, a 20-credit module includes 200 learning hours, normally including a minimum of 36 contact hours and maximum of 48 contact hours. Teaching will involve a blend of lectures, laboratories, practical demonstrations and tutorials.	
Learning Activities During completion of this module, the learning activities undertaken to achieve the module learning outcomes are stated below:	**Student Learning Hours** (Note: Learning hours include both contact hours and hours spent on other learning activities)
Lecture / Core Content Delivery	24
Tutorial / Synchronous Support Activity	12
Laboratory / Practical Demonstration / Workshop	12
Independent Study	152
n/a	
n/a	
TOTAL	200

Indicative Resources
The following materials form essential underpinning for the module content and ultimately for the learning outcomes: Textbook: Entomology & Pest Management (2021). Pedigo, L.P., Marlin, E.R., Krell, K.K. 7th Edition Textbook: Parasitology: An Integrated Approach (2022). Gunn, A., Pitt, S.J.
(N.B. Although reading lists should include current publications, students are advised (particularly for material marked with an asterisk*) to wait until the start of session for confirmation of the most up-to-date material)

Attendance and Engagement Requirements
In line with the Student Attendance and Engagement Procedure, Students are academically engaged if they are attending and participating in all timetabled programme activities including on-campus and online teaching sessions, asynchronous online learning activities, placement, work-based elements, course-related learning resources, and complete assessments and submit these on time. **For the purposes of this module, academic engagement equates to the following:** Attendance on-campus at all classes.

Equality and Diversity
The University's Equality, Diversity and Human Rights Procedure can be accessed at the following link: UWS Equality, Diversity and Human Rights Code. In line with current legislation (Equality Act, 2010) and the UWS Equality, Diversity, and Human Rights Code, our modules are accessible and inclusive, with reasonable adjustment for different needs where appropriate. Module materials comply with University guidance on inclusive learning and teaching, and specialist assistive equipment, support provision and adjustment to assessment practice will be made in accordance with UWS policy and regulations. Where modules require practical and/or laboratory based learning or assessment required to meet accrediting body requirements the University will make reasonable adjustment such as adjustable height benches or assistance of a 'buddy' or helper.
(N.B. Every effort will be made by the University to accommodate any equality and diversity issues brought to the attention of the School)

Supplemental Information

Divisional Programme Board	**Biological Sciences Health**
Overall Assessment Results	☐ **Pass / Fail** ☒ **Graded**
Module Eligible for Compensation	☒ **Yes** ☐ **No** **If this module is eligible for compensation, there may be cases where compensation is not permitted due to programme accreditation requirements. Please check the associated programme specification for details.**
School Assessment Board	Biology
Moderator	Mhairi Alexander
External Examiner	J Spicer
Accreditation Details	
Module Appears in CPD catalogue	☐ **Yes** ☒ **No**
Changes / Version Number	3

Assessment (also refer to Assessment Outcomes Grids below)
Assessment 1
Class test written Essays
Assessment 2
Research Exercise and Quiz
Assessment 3
(N.B. (i) Assessment Outcomes Grids for the module (one for each component) can be found below which clearly demonstrate how the learning outcomes of the module will be assessed. (ii) An indicative schedule listing approximate times within the academic calendar when assessment is likely to feature will be provided within the Student Module Handbook.)

Component 1

Assessment Type	LO1	LO2	LO3	LO4	LO5	Weighting of Assessment Element (%)	Timetabled Contact Hours
Class test (written)	☒	☒	☒	☒	☒	60	3

Component 2							
Assessment Type	**LO1**	**LO2**	**LO3**	**LO4**	**LO5**	**Weighting of Assessment Element (%)**	**Timetabled Contact Hours**
Report of practical/field/ clinical work	☒	☒	☒	☒	☒	40	17

Component 3							
Assessment Type	**LO1**	**LO2**	**LO3**	**LO4**	**LO5**	**Weighting of Assessment Element (%)**	**Timetabled Contact Hours**
	☐	☐	☐	☐	☐		
Combined total for all components						100%	20 hours

Change Control

What	When	Who
Moderator change	Febuary 2026	R Thacker