Liverpool John Moores University

Title:	PARASITES, PATHOGENS AND INFECTION
Status:	Definitive
Code:	**7134NATSCI** (126194)
Version Start Date:	01-08-2021
Owning School/Faculty:	Biological and Environmental Sciences
Teaching School/Faculty:	Biological and Environmental Sciences

Team	Leader
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Academic Level:	FHEQ7	**Credit Value:**	20	**Total Delivered Hours:**	40
Total Learning Hours:	200	**Private Study:**	160		

Delivery Options
Course typically offered: Semester 1

Component	Contact Hours
Lecture	16
Practical	18
Workshop	6

Grading Basis: 50 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Presentation	ORAL	Oral presentation in conference style	40	
Report	REPORT	Practical based report	60	

Aims

To gain knowledge of the biology of major endemic, epidemic and zoonotic infectious diseases of humans, animals and plants, at both the individual and the community levels.
To learn and evaluate methods of controlling the risk and occurrence of infectious diseases and the evolutionary responses of pathogens and vectors to control.

Learning Outcomes

After completing the module the student should be able to:

1	Critically discuss major infectious diseases caused by different types of pathogens including bacteria, viruses and eukaryotes
2	Understand and critically assess current methods of control of infectious threats and pathogens, as well as current treatments for infectious diseases
3	Explain mechanisms of resistance to measures of control of risk and disease

Learning Outcomes of Assessments

The assessment item list is assessed via the learning outcomes listed:

ORAL PRESENTATION	1	2	3
PRACTICAL REPORT	1	2	3

Outline Syllabus

The module covers major infectious disease threats, taking a 'one-health' approach encompassing pathogens, hosts, vectors and their environment, and looking at the different ecological, physiological and genetic mechanisms that increase the risk and occurrence of diseases. Students will learn and evaluate the role of different transmission routes, methods of control of risks and outbreaks (including vaccination, mass drug administration and vector control), and diagnosis and treatment options. They will also learn about the major challenges for control of infectious diseases, namely the mechanisms evolved by pathogens and vectors in response to these control efforts, for example antimicrobial, drug and pesticide resistance.

Learning Activities

The module is delivered through a combination of lectures, practical sessions and workshops.

Notes

The module will cover major themes (e.g. host-pathogen interaction, eco-epidemiology, disease control and elimination, or zoonoses and anthroponoses). These will be illustrated using examples from the range of infectious diseases of

humans, animals and plants, emphasising the interactions between pathogens, hosts, vectors and their environment.