# University of the West of Scotland **Module Descriptor**

Session: 2023/24

Last modified: 28/02/2023 16:57:31

Status: Published

Title of Module: Principles of Infection and Disease Control

Code: BIOL11022	SCQF Level: 11 (Scottish Credit and Qualifications Framework)	Credit Points: 20	ECTS: 10 (European Credit Transfer Scheme)	
School:	School of Health and Life Sciences			
Module Co-ordinator:	William Gordon Mackay			

#### **Summary of Module**

This module will provide students with the opportunity to gain critical analytical skills in Infection and Disease Control. It aims to provide underpinning specialised knowledge of routes of infection and standard infection control precautions, including a detailed analysis of vaccination programmes, how vaccination works and its limitations and its impact. Discussions will emerge on topics such as tropical diseases (eg. Malaria, Ebola, Zika), seasonal epidemics (flu, norovirus) and antimicrobial resistance, and also on Public Health success stories, such as the eradication of smallpox, and how these have been influenced by health inequalities. Students will be invited to carry out an independent case study after specific timetabled tutorials on 'how to write a case study' on topics of their choice.

Module Delivery	Method				
Face-To-Face	Blended	Fully Online	HybridC	HybridO	Work-based Learning
✓					

#### Face-To-Face

Term used to describe the traditional classroom environment where the students and the lecturer meet synchronously in the same room for the whole provision.

#### **Blended**

A mode of delivery of a module or a programme that involves online and face-to-face delivery of learning, teaching and assessment activities, student support and feedback. A programme may be considered "blended" if it includes a combination of face-to-face, online and blended modules. If an online programme has any compulsory face-to-face and campus elements it must be described as blended with clearly articulated delivery information to manage student expectations

Instruction that is solely delivered by web-based or internet-based technologies. This term is used to describe the previously used terms distance learning and e learning

#### HybridC

Online with mandatory face-to-face learning on Campus

Online with optional face-to-face learning on Campus

# Work-based Learning

Learning activities where the main location for the learning experience is in the workplace.

#### Campus(es) for Module Delivery The module will normally be offered on the following campuses / or by Distance/Online Learning: (Provided viable student numbers permit) Distance/Online Paisley: Ayr: Dumfries: Lanarkshire: London: Other: Learning:

	✓		

Term(s) for Module Delivery						
(Provided viable student numbers permit).						
Term 1						

# **Learning Outcomes: (maximum of 5 statements)**

On successful completion of this module the student will be able to:

- L1. Investigate the principles of the infection control process using the current literature in public health.
- L2. Critically evaluate historical case studies of infection control and management.
- L3. Apply the principles of vaccination to different types of infection (bacterial, viral, parasitic).
- L4. Critically evaluate vaccination programmes and how they have been used effectively to prevent and manage infections, and their limitations.

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 Level 11.  Critical and integrated understanding of current scientific literature in infection control.				
Practice: Applied Knowledge and Understanding	SCQF Level 11.  Develop case study reports in Public Health in the context of infection control.				
Generic Cognitive skills	SCQF Level 11.  Critically reviewing current literature, relevant case studies in infection control and make judgements where information comes from a number of sources.  Demonstrating a high degree of originality in dealing with professional level issues relating to the development of case studies.				
Communication, ICT and Numeracy Skills	SCQF Level 11.  Interpreting, using and evaluating a range of numerical and graphical data from infection control Research. Presentation of scientific knowledge through case study writing, and oral communication skills.				
Autonomy, Accountability and Working with others	SCQF Level 11.  Designing a work profile, meeting deadlines for case studies and presentations.				

Pre-requisites:	Before undertaking this module the student should have undertaken the following:			
	Module Code:	Module Title:		
	Other:			
Co-requisites	Module Code: Module Title:			

<sup>\*</sup> Indicates that module descriptor is not published.

#### Learning and Teaching

This module is a collaborative endeavor. It consists of blend lectures, aimed at setting the scene, tutorials and self-directed study, where students are responsible for the planning and implementation of the case study work (in consultation with staff members). Students will write their own case study using examples from the literature (for example the peer-reviewed literature, WHO, CDC, ECDC etc). The case study will be presented in a written report in the format of a WHO case study, and students will present their vaccine work as a poster presentation.

Learning Activities  During completion of this module, the learning activities undertaken to achieve the module learning outcomes are stated below:	Student Learning Hours (Normally totalling 200 hours): (Note: Learning hours include both contact hours and hours spent on other learning activities)
Lecture/Core Content Delivery	15
Tutorial/Synchronous Support Activity	14
Laboratory/Practical Demonstration/Workshop	7
Independent Study	164
	200 Hours Total

# \*\*Indicative Resources: (eg. Core text, journals, internet access)

The following materials form essential underpinning for the module content and ultimately for the learning outcomes:

Heymann D (2014). Control of Communicable Diseases Manual. 20th edition. Alpha Press. Halloran ME, Longini Jr IM, Struchiner CJ (2010). Design and analysis of vaccine studies. Springer. Abbas AK, Lichtman AH, Pillai S (2012). Basic immunology: functions and disorders of the immune system. 4th

edition. Saunders. Access to library; peer-reviewed journals, WHO case studies, CDC and ECDC materials

(\*\*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)

## **Engagement Requirements**

In line with the Academic Engagement Procedure, Students are defined as academically engaged if they are regularly engaged with timetabled teaching sessions, course-related learning resources including those in the Library and on the relevant learning platform, and complete assessments and submit these on time. Please refer to the Academic Engagement Procedure at the following link: Academic engagement procedure

Where a module has Professional, Statutory or Regulatory Body requirements these will be listed here: For the purposes of this module, academic engagement equates to the following: Attendance at synchronous sessions: lectures, workshops, and tutorials, completion of asynchronous activities, and submission of assessments to meet the learning outcomes of the module.

### **Supplemental Information**

Programme Board	Biological Sciences and Health
Assessment Results (Pass/Fail)	No
Subject Panel	Health L7-11
Moderator	Fiona Menzies
External Examiner	P Anyanwu
Accreditation Details	
Changes/Version Number	1.07  Removed Dr suffix For AY21-22 ASB (Subject Panel) changed and EE TBC

#### Assessment: (also refer to Assessment Outcomes Grids below)

Case study 60%

Poster presentation 40%

(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 Handbook.)

#### Assessment Outcome Grids (Footnote A.)

Component 1						
Assessment Type (Footnote B.)	Learning Outcome (1)	Learning Outcome (2)	Learning Outcome (3)	Learning Outcome (4)	Weighting (%) of Assessment Element	Timetabled Contact Hours
Case study	✓	✓			60	0

Component 2						
Assessment Type (Footnote B.)	Learning Outcome (1)	Learning Outcome (2)	Learning Outcome (3)	Learning Outcome (4)	Weighting (%) of Assessment Element	Timetabled Contact Hours
Presentation			✓	✓	40	0
		Components	100%	0 hours		

#### Footnotes

- A. Referred to within Assessment Section above
- B. Identified in the Learning Outcome Section above

# Note(s):

- 1. More than one assessment method can be used to assess individual learning outcomes.
- 2. Schools are responsible for determining student contact hours. Please refer to University Policy on contact hours (extract contained within section 10 of the Module Descriptor guidance note).

  This will normally be variable across Schools, dependent on Programmes &/or Professional requirements.

### **Equality and Diversity**

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 the 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.

Please refer to the UWS Equality and Diversity Policy at uws.ac.uk: http://www.uws.ac.uk/equality/UWS Equality and Diversity Policy

(N.B. Every effort will be made by the University to accommodate any equality and diversity issues brought to the attention of the School)