Module Descriptor

Title	Principles of Infection and Disease Control		
Session	2026/27	**Status**	Published
Code	BIOL11022	**SCQF Level**	11
Credit Points	20	**ECTS (European Credit Transfer Scheme)**	10
School	**Health and Life Sciences**		
Module Co-ordinator	Ngozi Amaeze		

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.

The distance learning version of the module is available only to HCPC-registered Biomedical Scientists enrolled on the IBMS accredited MSc Advanced Biomedical Science programme.

Module Delivery Method	**On-Campus**[1] ☒	**Hybrid**[2] ☐	**Online**[3] ☒	**Work -Based Learning**[4] ☐
Campuses for Module Delivery	☐ Ayr ☐ Dumfries	☒ Lanarkshire ☐ London ☐ Paisley	☒ Online / Distance Learning ☐ Other (specify)	

[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

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	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.
L5	

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

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.

This module is a collaborative endeavour. 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** (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
n/a	
n/a	
TOTAL	200

Indicative Resources

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)

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 at synchronous sessions: lectures, workshops, and tutorials, completion of asynchronous activities, and submission of assessments to meet the learning outcomes of the module.

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	Health
Moderator	Fiona Menzies
External Examiner	M Brown
Accreditation Details	
Module Appears in CPD catalogue	☐ **Yes** ☒ **No**
Changes / Version Number	2

Assessment (also refer to Assessment Outcomes Grids below)
Assessment 1
Case study 60%
Assessment 2
Poster presentation 40%
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**
Case study	☒	☒	☐	☐	☐	60	0

Component 2							
Assessment Type	**LO1**	**LO2**	**LO3**	**LO4**	**LO5**	**Weighting of Assessment Element (%)**	**Timetabled Contact Hours**
Presentation	☐	☐	☒	☒	☐	40	0

Component 3							
Assessment Type	**LO1**	**LO2**	**LO3**	**LO4**	**LO5**	**Weighting of Assessment Element (%)**	**Timetabled Contact Hours**
	☐	☐	☐	☐	☐		
Combined total for all components						100%	0 hours

Change Control

What	**When**	**Who**
Change of module coordinator	30JAN26	Gordie Mackay