

Session: 2023/24

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Title of Module: Public Health Microbiology			
Code: BIOL10002	SCQF Level: 10 (Scottish Credit and Qualifications Framework)	Credit Points: 20	ECTS: 10 (European Credit Transfer Scheme)
School:	School of Health and Life Sciences		
Module Co-ordinator:	Roderick Williams		
Summary of Module			
<p>Proposed aims for module are:</p> <ul style="list-style-type: none"> • Providing a historical overview of Public Health issues within the UK. • Critically analysing, evaluating epidemiological data and up to date methods used in the identification and management of outbreaks. • Reviewing and evaluating the role of public and government agencies in the development of the New Public Health, informing Public Health policies and reducing health inequalities. • Undertaking In depth study on the biology and management of outbreaks from food- and water-borne pathogens responsible for outbreaks in communities and hospitals in Scotland. • Critically analysing and developing skills through role play of the impact of public health policies and management in. • Analysing water treatment processes and protecting communities from water-borne outbreaks. <p>This module will work to develop a number of the key "I am UWS" Graduate Attributes to make those who complete the module, have Universal skills, that will make them Work Ready and Successful</p>			

Module Delivery Method					
Face-To-Face	Blended	Fully Online	HybridC	HybridO	Work-based Learning
	✓				
<p>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.</p> <p>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</p> <p>Fully Online 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.</p> <p>HybridC Online with mandatory face-to-face learning on Campus</p> <p>HybridO Online with optional face-to-face learning on Campus</p> <p>Work-based Learning Learning activities where the main location for the learning experience is in the workplace.</p>					

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)						
Paisley:	Ayr:	Dumfries:	Lanarkshire:	London:	Distance/Online Learning:	Other:
			✓			
Term(s) for Module Delivery						
(Provided viable student numbers permit).						
Term 1		Term 2	✓	Term 3		

Learning Outcomes: (maximum of 5 statements)	
<p>On successful completion of this module the student will be able to:</p> <p>L1. Appraise of the role of global historic public health issues in shaping current Public health approaches, strategies, policies and legislation.</p> <p>L2. Demonstrate knowledge of the role and function of agencies in the public health infrastructure responsible for formulating, evaluating, managing, and implementing public health policies and legislations.</p> <p>L3. Demonstrate a critical understanding of the biology of food- and water-borne pathogens involved in outbreaks of infectious disease and hospital acquired infections in Scottish communities and hospitals respectively.</p> <p>L4. Critically analyse the contribution of stressors such as social and economic in widening health inequalities.</p>	
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 10. Demonstrate a critical understanding of the roles of microorganisms which cause food- and water-borne infections in natural and man-made environments.
Practice: Applied Knowledge and Understanding	SCQF Level 10. Use the knowledge gained to solve outbreaks through role play and present their management plan in multiple formats e.g., case studies, press conference.
Generic Cognitive skills	SCQF Level 10. Critically review knowledge, theories and techniques utilised in current programmes for prevention of food and water-borne infections in communities
Communication, ICT and Numeracy Skills	SCQF Level 10. Interpret and evaluate a wide range of data types
Autonomy, Accountability and Working with others	SCQF Level 10. Exercise autonomy and initiative in sourcing and interpreting scientific research papers

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

* Indicates that module descriptor is not published.

Learning and Teaching	
<p>The mode of delivery will be blended. Lectures will deliver fundamental information which will assist students to understand key concepts and terminologies in the management of outbreaks in natural and man-made environments. Students will be required to access lecture notes, links to reference sources, tutorials, and other support materials on the VLE.</p> <p>Practical sessions in this module will be a virtual group exercise. It is aimed to equip students with skills in the data handling, data analysis, the use of statistics to test hypothesis, and transfer the knowledge from research articles into the new context provided in the practical sessions to pinpoint the source and cause of outbreaks.</p> <p>Tutorials will be provided to support development of the skills required to complete the virtual exercise and report.</p> <p>There will be no written class tests in this module.</p>	
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	30
Laboratory/Practical Demonstration/Workshop	18
Independent Study	152
	200 Hours Total
**Indicative Resources: (eg. Core text, journals, internet access)	
<p>The following materials form essential underpinning for the module content and ultimately for the learning outcomes: www.hps.scot.nhs.uk/ www.hpa.org.uk/ www.food.gov.uk/ www.sepa.org.uk/</p> <p>Principle of Public Health Microbiology, Robert S. Burlage. Jones & Bartlett Learning 2012.</p>	

Use of up to date publications in the research area

(**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:

Attendance at synchronous sessions (lectures, tutorials and practicals), 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	Anne Crilly
External Examiner	P Anyanwu
Accreditation Details	This module is part of the BSc (Hons) Biomedical Science programme; accredited by IBMS. This module is part of the BSc (Hons) Applied Bioscience and BSc (Hons) Applied Bioscience with Forensic Investigation programmes; accredited by Royal Society of Biology (RSB).
Version Number	2.09

Assessment: (also refer to Assessment Outcomes Grids below)

The assessment involve four coursework that will provide students with the opportunity to demonstrate theoretical knowledge, critical, analytical, and reflective skills related to public health microbiology.

There are two mains assessments in this module:

Coursework 1 (60%) will be composed of 3 essays.

- (a) Critical analysis and opinion essay (20%)
- (b) Theoretical and process essay (30%), and
- (c) Reflective essay (10%).

Coursework 2 (40%) is a Skills development Role play activity (40%).

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(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	
Portfolio of written work	✓	✓	✓		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	
Clinical/ Fieldwork/ Practical skills assessment/ Debate/ Interview/ Viva voce/ Oral		✓		✓	40	0	
Combined Total For All 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 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.

[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)