






MODULE SPECIFICATION

Part 1: Information			
Module Title	Microbiology		
Module Code	USSKB6-15-2	Level	2
For implementation from	September 2019		
UWE Credit Rating	15	ECTS Credit Rating	7.5
Faculty	Health and Applied Sciences.	Field	Applied Sciences
Department	Department of Applied Sciences.		
Contributes towards	BSc (Hons) Biomedical Science, BSc (Hons) Biomedical Science (with Foundation Year); BSc (Hons) Applied Biomedical Science; BSc (Hons) Applied Biomedical Science (with Foundation Year); MSci Biomedical Science; MSci Biomedical Science (with Foundation Year).		
Module type:	Standard		
Pre-requisites	Pathophysiology of Disease (USSKA7-30-1) OR Infection and Disease (USSKA7-30-1)		
Excluded Combinations	None		
Co- requisites	None		
Module Entry requirements	None		

Part 2: Description	
<p>This module aims to deepen your understanding of microorganisms, in particular of bacteria and viruses. By covering fundamental aspects of the bacterial genome, cell structure and physiology, you will gain an insight into their roles in bacterial adaptability, survival and pathogenicity. You will learn about viruses, including viruses of bacteria (bacteriophages), how they are cultivated and their replication cycles.</p> <p>Syllabus Outline</p> <ul style="list-style-type: none"> • Bacterial growth and death: optimising growth and analysing death • The structure and significance of bacterial cell walls and outer membranes • Bacterial transport and communication systems: uptake and efflux, quorum sensing • Evolution, the bacterial genome and recombinant DNA technology • The viruses: virus structure, classification and replication • Microbial diseases, virulence factors and control of disease: focus on specific pathogens in the context of the generalised infection cycle and an introduction to epidemiology 	

Generic Graduate Skill	Specific strand (eg presentation) - Optional	Introduced	Developed	Evidenced
1. Communication		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2. Professionalism		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3. Critical Thinking		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
4. Digital Fluency		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
5. Innovative and Enterprising		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Forward Looking		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7. Emotional Intelligence		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Globally Engaged		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Part 3: Assessment: Strategy and Details		
<p>The controlled component is a written exam. This assessment will provide students with an opportunity to demonstrate both their knowledge on a broad range of topics through a series of multiple choice questions, and more in-depth knowledge through a selection of medium length questions. This assessment will test the full range of learning outcomes and will provide a valuable learning experience through recalling and demonstrating knowledge, which will be of benefit when progressing to final year modules.</p> <p>The coursework comprises one element:</p> <p>This is a researched essay which will require students to complete a 1000 word written account on an aspect of microorganisms. This exercise provides a valuable learning experience through applying knowledge whilst supporting and expanding upon this through the published literature. It is designed to encourage discussion, as opposed to just description, of specific aspects of microorganisms. It builds upon literature searching and evaluation skills acquired at level 1 and supports the development of these, in preparation for level 3.</p> <p>Students are provided with formative feed-forward for their exam through a revision and exam preparation session prior to the exam and through the support materials supplied through Blackboard.</p> <p>All work is marked in line with the Faculty of Health and Applied Sciences Generic Assessment Criteria for Level 2 and conforms to university policies for the setting, collection, marking and return of student work. Assessments are described in the Module handbook that is supplied at the start of module.</p>		
Identify final timetabled piece of assessment (component and element)	Component A	
% weighting between components A and B (Standard modules only)	A: 50	B: 50
First Sit		
Component A (controlled conditions) Description of each element	Element weighting (as % of component)	
1. Written Examination (2 hours)	100	
Component B Description of each element	Element weighting (as % of component)	
1. Essay (1000 words)	100	
Resit (further attendance at taught classes is not required)		
Component A (controlled conditions)	Element weighting (as % of component)	

Description of each element																								
1. Written Examination (2 hours)	100																							
Component B Description of each element	Element weighting (as % of component)																							
1. Essay (1000 words)	100																							
Part 4: Learning Outcomes & KIS Data																								
Learning Outcomes	<p>On successful completion of this module students will be able to:</p> <ul style="list-style-type: none"> Discuss important features of microbial structure and physiology and relate these to the success of microorganisms as pathogens or their survival in the environment (component A and component B) Describe the unique nature of viruses (component A) Describe the organisation, modification and manipulation of the bacterial genome (component A) Contextualise the microbial infection cycle (component A and component B) Analyse data derived from laboratory study of microorganisms (component A) 																							
Key Information Sets Information (KIS)	<table border="1"> <thead> <tr> <th colspan="5">Key Information Set - Module data</th> </tr> </thead> <tbody> <tr> <td colspan="5">Number of credits for this module</td> <td style="text-align: right;">15</td> </tr> <tr> <td>Hours to be allocated</td> <td>Scheduled learning and teaching study hours</td> <td>Independent study hours</td> <td>Placement study hours</td> <td>Allocated Hours</td> <td></td> </tr> <tr> <td style="text-align: center;">150</td> <td style="text-align: center;">36</td> <td style="text-align: center;">114</td> <td style="text-align: center;">0</td> <td style="text-align: center;">150</td> <td style="text-align: center;"></td> </tr> </tbody> </table>	Key Information Set - Module data					Number of credits for this module					15	Hours to be allocated	Scheduled learning and teaching study hours	Independent study hours	Placement study hours	Allocated Hours		150	36	114	0	150	
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Contact Hours	<p>The table below indicates as a percentage the total assessment of the module which constitutes a;</p> <p>Written Exam: Unseen or open book written exam Coursework: Written assignment or essay, report, dissertation, portfolio, project or in class test</p>																							
Total Assessment	<table border="1"> <thead> <tr> <th colspan="2">Total assessment of the module:</th> </tr> </thead> <tbody> <tr> <td>Written exam assessment percentage</td> <td style="text-align: center;">50%</td> </tr> <tr> <td>Coursework assessment percentage</td> <td style="text-align: center;">50%</td> </tr> <tr> <td></td> <td style="text-align: center;">100%</td> </tr> </tbody> </table>	Total assessment of the module:		Written exam assessment percentage	50%	Coursework assessment percentage	50%		100%															
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Reading List	<p>Reading list: https://blackboard.uwe.ac.uk/webapps/osc-BasicLTI-bb_bb60/tool.jsp?course_id=284166_1&content_id=5712369_1</p>																							

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First CAP Approval Date	28/5/2014			
Revision ASQC Approval Date	27/6/2018	Version	2	RIA 12666
Revision ASQC Approval Date	26/06/2019	Version	3	RIA 13023