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## MODULE DESCRIPTOR

### Module Title

Pharmaceutical Microbiology

Reference	PH2134	Version	3
Created	September 2018	SCQF Level	SCQF 8
Approved	March 2013	SCQF Points	15
Amended	September 2018	ECTS Points	7.5

### Aims of Module

To develop knowledge and understanding of pharmaceutical microbiology and its integration into healthcare.

### Learning Outcomes for Module

On completion of this module, students are expected to be able to:

- 1 Describe microorganisms of relevance to healthcare and the pharmaceutical industry as causative agents of infection and contamination.
- 2 Explain the action of antimicrobial agents.
- 3 Demonstrate knowledge and understanding of the practical aspects of pharmaceutical microbiology.
- 4 Perform practical procedures to demonstrate competence of aseptic manipulation.

### Indicative Module Content

An application of the impact of microorganisms upon health and production of pharmaceuticals, and the role antimicrobials within this. Topics include: structure and function of components of microorganisms as infective agents of pharmaceutical relevance; antimicrobial agents and factors influencing activity; microbial genetics and antibiotic resistance; infectious diseases and the immune system for host defence; infection control; microbial contamination; product spoilage and antimicrobial preservation.

### Module Delivery

Lectures and coursework (which include practical laboratory experiments, tutorials and problem solving exercises). Directed study includes directed reading in support of lectures and coursework.

### Indicative Student Workload

	Full Time	Part Time
Contact Hours	52	N/A
Non-Contact Hours	98	N/A
Placement/Work-Based Learning Experience [Notional] Hours	N/A	N/A
TOTAL	150	N/A
<i>Actual Placement hours for professional, statutory or regulatory body</i>		

## ASSESSMENT PLAN

If a major/minor model is used and box is ticked, % weightings below are indicative only.

### Component 1

Type:	Examination	Weighting:	100%	Outcomes Assessed:	1, 2, 3
Description:	A written examination comprising multiple-choice and essay type questions.				

### Component 2

Type:	Coursework	Weighting:	0%	Outcomes Assessed:	4
Description:	Competency assessment based on experiments undertaken during coursework.				

## MODULE PERFORMANCE DESCRIPTOR

### Explanatory Text

To pass this module, the student MUST achieve a module Grade of Grade D or better.

Module Grade	Minimum Requirements to achieve Module Grade:
<b>A</b>	When the mark for C1 is 70% or more and a Pass in C2.
<b>B</b>	When the mark for C1 is 60-69% and a Pass in C2.
<b>C</b>	When the mark for C1 is 50-59% and a Pass in C2.
<b>D</b>	When the mark for C1 is 40-49% and a Pass in C2.
<b>E</b>	When the mark for C1 is 35-39% and a Pass in C2.
<b>F</b>	When the mark for C1 is less than 35% and/or an unsuccessful attempt (i.e. Fail) in C2.
<b>NS</b>	Non-submission of work by published deadline or non-attendance for examination

### Module Requirements

Prerequisites for Module	Successful completion of Stage 1 or equivalent.
Corequisites for module	None.
Precluded Modules	None.

## INDICATIVE BIBLIOGRAPHY

- 1 DENYER, S.P., HODGES, N.A. AND GORMAN, S.P. Hugo and Russell's Pharmaceutical Microbiology. Current edition. Oxford: Wiley-Blackwell.