

MODULE DESCRIPTOR

Module Title

Advanced Microbiology

Reference	AS3433	Version	2
Created	August 2021	SCQF Level	SCQF 9
Approved	February 2018	SCQF Points	15
Amended	August 2021	ECTS Points	7.5

Aims of Module

To provide students with the ability to examine a range of topics related to advanced microbiology.

Learning Outcomes for Module

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

- 1 Demonstrate understanding of the role and applications of biofilms, cell signalling, and molecular biology in medical, environmental and food microbiology.
- 2 Explain the rationale and process for drug discovery from aquatic micro-organisms.
- 3 Understand the role of micro-organisms in the remediation of the environment.
- 4 Examine current topics of interest in the field of advanced microbiology.

Indicative Module Content

Biofilms in medicine, food hygiene and the environment; cell signalling in the environment and its role in pathogenesis; application of molecular biology in environmental, medical and food microbiology; aquatic microbes as a source of pharmaceuticals; exploitation of micro-organisms for environmental clean-up; bioremediation; biodegradation; current topics - will allow delivery to be tailored to current interests and will be influenced by current advances/topics of the time.

Module Delivery

The module is based on lectures with an element of student centred learning and focussed tutorials on recently published research. Appropriate guest seminars will enhance the delivery of the unit.

Indicative Student Workload

	Full Time	Part Time
Contact Hours	30	N/A
Non-Contact Hours	120	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, 4
Description:	Unseen, closed book examination				

MODULE PERFORMANCE DESCRIPTOR**Explanatory Text**

Component 1 (EX1) comprises 100% of the module grade. A minimum of a Grade D is required to pass the module.

Module Grade	Minimum Requirements to achieve Module Grade:
A	A: a score of 70% or above is required
B	B: a score of between 60-69% is required
C	C: a score of between 50-59% is required
D	D: a score of between 40-49% is required
E	E: a score of between 35-39% is required
F	F: a score of less than 35% is required
NS	Non-submission of work by published deadline or non-attendance for examination

Module Requirements

Prerequisites for Module	Successful completion of Stage Two of the course, or equivalent.
Corequisites for module	None.
Precluded Modules	None.

INDICATIVE BIBLIOGRAPHY

- 1 Directed reading will consist of a selection of articles from current journal papers and recent reviews of topics of relevance.