

MODULE DESCRIPTOR

Module Title

Microbial Biotechnology for Industry

Reference	PL3433	Version	2
Created	February 2024	SCQF Level	SCQF 9
Approved	June 2023	SCQF Points	15
Amended	August 2024	ECTS Points	7.5

Aims of Module

To provide students with the ability to examine a range of topics related to the application of microbiology to biotechnology and the bioscience industry.

Learning Outcomes for Module

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

- 1 Explain the role of micro-organisms in manufacturing processes of the pharmaceutical, food, environmental industries.
- 2 Demonstrate understanding of the required infrastructure and economics involved in industrial applications of microbial biotechnology.
- 3 Examine current topics of interest in the field of microbial biotechnology and industrial applications of microbiology.

Indicative Module Content

Application of molecular biology in environmental, pharmaceutical and food microbiology; microbes as a source of biological substances of value; advantages and challenges in using microbes in industrial processes; stain improvement and degeneration; exploitation of micro-organisms for environmental bioremediation; 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 centered learning and focused tutorials on recently published, topical, research. Appropriate guest seminars will enhance the delivery of the module.

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
 Description: Closed book examination

MODULE PERFORMANCE DESCRIPTOR**Explanatory Text**

Component 1 (CW1) 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
B	B
C	C
D	D
E	E
F	F
NS	Non-submission of work by published deadline or non-attendance for examination

Module Requirements

Prerequisites for Module: None, in addition to SCQF level 9 entry requirements or equivalent.
 Corequisites for module: None.
 Precluded Modules: None.

INDICATIVE BIBLIOGRAPHY

None.