

Module Title Advanced Microbiology	Reference AS4033 SCQF SCQF Level 10 SCQF Points 15 ECTS Points 7.5 Created May 2002 Approved May 2008 Amended May 2011 Version No. 2
Keywords Microbiology, Ecology	

This Version is No Longer Current

The latest version of this module is available [here](#)

Prerequisites for Module

None in addition to entry requirements for SCQF10.

Indicative Student Workload

<i>Contact Hours</i>	Full Time
Lectures/Tutorials/Seminars	30

Corequisite Modules

None.

<i>Directed Study</i>	
Case study	10
Directed study	40

Precluded Modules

None.

<i>Private Study</i>	
Private Study	70

Aims of Module

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

Mode of Delivery

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

Learning Outcomes for Module

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

Assessment Plan

Learning Outcomes Assessed

to be able to.

1. Discuss the role and application of biofilms, cell signalling, and molecular biology in medical, environmental and food microbiology.
2. Discuss the rationale and process for drug discovery from aquatic micro-organisms.
3. Discuss 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

Component 1	1,2,3,4
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Component 1 is assessed by a closed book examination.

Indicative Bibliography

1. No core text book will be used. Instead recently published scientific papers will form the basis of background material.

time.