

MODULE DESCRIPTOR

Module Title

Bioanalysis			
Reference	AS2189	Version	3
Created	August 2021	SCQF Level	SCQF 8
Approved	July 2018	SCQF Points	15
Amended	August 2021	ECTS Points	7.5

Aims of Module

To provide the student with an understanding of routine and state of the art methods of bioanalysis.

Learning Outcomes for Module

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

- 1 Explain the importance of sample collection, processing, preparation and storage for bioanalytical and pharmaceutical analysis.
- 2 Explain applications of bioanalysis.
- 3 Assess the use of diverse methods for detection and measurement of target biomolecules (small and large) in real-life situations.

Indicative Module Content

Diversity of target analytes and sample matrices such as blood, tissues from all parts of the body and urine. Challenges of selecting/developing robust processing and storage strategies. This module will advance the student's knowledge of spectroscopic, chromatographic and other current bioanalytical methods such as ligand binding assays.

Module Delivery

A combined approach utilising formal lectures, directed reading and tutorials.

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: Unseen, closed book examination with a seen question

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 1 or equivalent.
Corequisites for module	None.
Precluded Modules	None.

INDICATIVE BIBLIOGRAPHY

- 1 LI, W., ZHANG, J., and Tse, F.L.S. *Handbook of LC-MS Bioanalysis: Best Practices, Experimental Protocols, and Regulations* Current Edition. John Wiley & sons
- 2 Selected scientific publications.