MODULE DESCRIPTOR

Module Title

Bioinformatics

Reference	PL3145	Version	1
Created	October 2022	SCQF Level	SCQF 9
Approved	June 2023	SCQF Points	15
Amended	August 2021	ECTS Points	7.5

Aims of Module

To give students studying Applied Biosciences a comprehensive understanding of the principles of bioinformatics and biological databases.

Learning Outcomes for Module

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

1	Explain the various techniques available to study genomes, genes and gene products.
2	Discuss basic bioinformatics techniques for analysis of sequence data.
3	Analyse sequence data and show the relationship between sequences.

Indicative Module Content

Background to bioinformatics; Databases; BLAST searches; Alignments; Phylogenetic analysis; Genome biology; Computer languages; -omics analysis; Bioinformatical statistics

Module Delivery

A combined approach utilising formal lectures and computer workshops.

Indicative Student Workload	Full Time	Part Time
Contact Hours	34	N/A
Non-Contact Hours	116	N/A
Placement/Work-Based Learning Experience [Notional] Hours	N/A	N/A
TOTAL	150	N/A
Actual Placement hours for professional, statutory or regulatory body		

Module Ref:	PL3145 v1

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 online examination with restricted access to relevant specified databases				

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
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	Successful completion of Stage 2 of the course or equivalent.
Corequisites for module	None.
Precluded Modules	None.

INDICATIVE BIBLIOGRAPHY

1	LESK A.M. 2020. Bioinformatics. 1st Edition. OUP.
2	HODGMAN C., FRENCH A., and WESTHEAD D. 2009. BIOS Instant Notes: Bioinformatics. 2nd Edition. Taylor & Francis.