

Module Details	
Module Title	Practical Molecular Biology
Module Code	BIS7027-B
Academic Year	2023/4
Credits	20
School	School of Chemistry and Biosciences
FHEQ Level	FHEQ Level 7

Contact Hours	
Type	Hours
Lectures	9
Tutorials	4
Laboratories	27
Directed Study	140

Availability	
Occurrence	Location / Period
BDA	University of Bradford / Semester 2

Module Aims
<p>To undertake a short research/data driven project, including both wet lab and dry lab (computational) elements.</p> <p>To become familiar with the experimental techniques required and optimise the experimental conditions and protocols necessary for a longer study.</p> <p>To develop an appreciation of the detailed requirements of a research project, its time management, the planning of different stages of the experimental work, and a projected list of proposed outcomes.</p>

Outline Syllabus
Primer design; Cell culture; RNA isolation; Reverse transcription; PCR & qPCR; Westernblotting; Data analysis & statistics;

Learning Outcomes	
Outcome Number	Description
01	Critically evaluate and communicate scientific data in the context of published work
02	Demonstrate critical thinking
03	Demonstrate an understanding of research and scientific method
04	Undertake project planning and time management, agree objectives, responsibilities and working arrangements
05	Work with a supervisor and technical staff to plan, agree objectives, responsibilities and working arrangements; explore problems and compare and select options to overcome them
06	Demonstrate effective time management

Learning, Teaching and Assessment Strategy
N/A

Mode of Assessment			
Type	Method	Description	Weighting
Summative	Coursework - Written	Laboratory notebook	20%
Summative	Laboratory Report	Interim Research Project Report	80%

Reading List
To access the reading list for this module, please visit <a href="https://bradford.rl.talis.com/index.html">https://bradford.rl.talis.com/index.html</a>

*Please note:*

*This module descriptor has been published in advance of the academic year to which it applies. Every effort has been made to ensure that the information is accurate at the time of publication, but minor changes may occur given the interval between publishing and commencement of teaching. Upon commencement of the module, students will receive a handbook with further detail about the module and any changes will be discussed and/or communicated at this point.*