

LF407-30 MBio Skills Module for in-house students

23/24

Department

Life Sciences

Level

Undergraduate Level 4

Module leader

Katrine Wallis

Credit value

30

Module duration

20 weeks

Assessment

Multiple

Study location

University of Warwick main campus, Coventry

Description

Introductory description

This module contains the skills for MBio in-house students. These skills are essential for a career in science.

Module aims

Demonstration of skills acquisition

Outline syllabus

This is an indicative module outline only to give an indication of the sort of topics that may be covered. Actual sessions held may differ.

Students will have a one week lab which will teach them how experiments are planned over a longer time scale than the usual undergraduate lab and familiarise them with good record keeping and working practices in the lab building on what they already know from previous years. Students will write a proposal for the projects which will require understanding the background and wide context to the project aims and objectives of their projects and what they are going to do to

address these aims.

Students will read and critically appraise journal papers in journal clubs

Students will learn data handling and IT skills that are required for research

Learning outcomes

By the end of the module, students should be able to:

- Students will appraise data handling and techniques used in science
- Students will learn design and present research projects
- Students will learn to critically assess research papers

Subject specific skills

Students will gain scientific knowledge related to their chosen projects and assessments.

Transferable skills

Critical thinking: Required for appraisal of literature and data analysis

Information literacy: Finding and assessing literature for assessments

Digital literature: Use of appropriate software in the lab and data analysis sessions

Communication: Research proposal requires writing for different audiences. journal clubs require oral presentation

Team working: Working in pairs or small groups in the lab

Problem solving: Required for data analysis

Study

Study time

Type	Required
Lectures	1 session of 1 hour (0%)
Seminars	3 sessions of 2 hours (2%)
Tutorials	4 sessions of 4 hours (5%)
Practical classes	5 sessions of 7 hours (12%)
Private study	242 hours (81%)
Total	300 hours

Private study description

Research into the background to the different parts of their assignments. Time spent on data analysis for the data analysis part

Costs

No further costs have been identified for this module.

Assessment

You do not need to pass all assessment components to pass the module.

Assessment group D

	Weighting	Study time	Eligible for self-certification
Data analysis report 1	17%		Yes (extension)
Data analysis report assessing content in first 2 data analysis sessions			
Data analysis report 2	17%		Yes (extension)
Data analysis report assessing content in last 2 data analysis sessions			
Project journal paper presentation	4%		No
A presentation of a paper related to the project to the research group the student is placed in			
Research proposal	34%		Yes (extension)
A research proposal pro forma relating to the project the student has chosen			
Journal club	8%		No
A tutorial based discussion of a number of research papers with a presentation at the end			
Lab Viva	20%		No
A viva to assess that the students have learnt techniques and data analysis from the practical lab			

Assessment group R

	Weighting	Study time	Eligible for self-certification
No reassessment	100%		No
Module not reassessed			

Feedback on assessment

Oral or written feedback depending on assignment

[Past exam papers for LF407](#)

Availability

Courses

This module is Core for:

- Year 4 of ULFA-C1A2 Undergraduate Biochemistry (MBio)
- Year 4 of ULFA-C1A1 Undergraduate Biological Sciences (MBio)
- Year 4 of ULFA-C1A3 Undergraduate Biomedical Science (MBio)
- Year 4 of ULFA-B142 Undergraduate Neuroscience (MBio)