# LF407-30 MBio Skills Module for inhouse 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 literate and data analysis Information literacy: Finding and assessing literature for assessments Digital literature: Use of appropriate software int he 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

Туре
Lectures
Seminars
Tutorials
Practical classes
Private study
Total

#### Required

1 session of 1 hour (0%) 3 sessions of 2 hours (2%) 4 sessions of 4 hours (5%) 5 sessions of 7 hours (12%) 242 hours (81%) 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)