

LF409-30 MBio Skills module for Industry Students

23/24

Department

Life Sciences

Level

Undergraduate Level 4

Module leader

Katrine Wallis

Credit value

30

Module duration

30 weeks

Assessment

Multiple

Study locations

Distance or Online Delivery Primary
University of Warwick main campus, Coventry

Description

Introductory description

This module contains the skills for MBio industry 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.

There are two elements to this module: A port folio and the writing of a research grant proposal. The portfolio will be covering journal clubs which require the students to engage with the scientific literature and present a paper to either their placement group or an academic in the department of Life Sciences. Data handling will require the students to appraise a data handling method used

inter project or alternatively ones set by an academic in Life Sciences. Technical essays will require critical appraisal of techniques used in students projects including the advantages and disadvantages of using this technique. The portfolio will be supported by a workshop held remotely and be interim feedback via email or the Mohara portfolio on an ongoing basis throughout the year.

The research proposal requires the students to write a research proposal akin to a research council proposal based on a research paper of the students choosing. This is supported by a lecture and a workshop on what to do as well as individual or small group writing support by academics in Life sciences.

Learning outcomes

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

- Students will appraise data handling and techniques that are used in their project
- Students will learn design and present research projects
- Students will learn to critically assess research papers

Subject specific skills

Students will learn about principles of lab techniques and data handling relating to their projects. The knowledge acquired will be individual depending on their choice of topics and papers to cover in the assessment

Transferable skills

Critical thinking: Required for appraisal of papers, data analysis and writing of grant proposal

Information Literacy: Students will need to look for information relevant to their assessments and assess whether these are of appropriate value

Digital literacy: Use of Mohara to create a portfolio and appropriate software packages for their data handling

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

Problem solving: Required for data analysis

Intercultural awareness and self awareness: Students write a reflective account on their experience of the year in industry as part of the portfolio and this should address moving from university into the industry environments (often a culture shock for students) and address their personal development over the year.

Study

Study time

Type	Required
Lectures	1 session of 1 hour (0%)
Seminars	3 sessions of 1 hour (1%)
Private study	196 hours (65%)
Assessment	100 hours (33%)
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 A

	Weighting	Study time
Skills portfolio for MBlo students in Industry Mohara portfolio	60%	60 hours
Research Grant Proposal Proforma for a research council grant proposal	40%	40 hours

Assessment group R

	Weighting	Study time
No reassessment Not reassessed	100%	

Feedback on assessment

Written feedback on assignments

Availability

Courses

This module is Core for:

- Year 4 of ULFA-C1A6 Undergraduate Biochemistry with Industrial Placement (MBio)
- Year 4 of ULFA-C1A5 Undergraduate Biological Sciences with Industrial Placement (MBio)
- Year 4 of ULFA-C1A7 Undergraduate Biomedical Science with Industrial Placement (MBio)
- Year 4 of ULFA-B143 Undergraduate Neuroscience (with Industrial Placement) (MBio)