LF404-90 MBio Research Project (Industrial Placement)

23/24

Department
Life Sciences
Level
Undergraduate Level 4
Module leader
Christopher Rodrigues
Credit value
90
Module duration
52 weeks
Assessment
Multiple
Study location
Placement.

Description

Introductory description

MBio Research Project (Industrial Placement)

Module aims

The aim of this module is to provide students with professional research skills through an extended period of practice in an industrial setting.

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 be offered projects based on ongoing research programmes within the host company. The student will have a discrete project and, after appropriate training, be involved in design, analysis and execution of all appropriate experimental work. The placement supervisors will be responsible for instruction and training on a day-to-day basis. The student will also have an academic supervisor, who will have dual roles, (i) to ensure that the project provides adequate

training for the student and (ii) to monitor the progress of the student through monthly discussions with the student and the placement supervisor.

Learning outcomes

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

- present research both orally and in written format, in a manner that is consistent with scientific research practice
- plan, conceptualize and execute experimental approaches that lead to scientific data collection
- critically evaluate data and draw scientifically-valid conclusions, drawing where necessary, from quantitative and statistical approaches
- demonstrate awareness of research culture and the value of developing a collegial and professional relationship with other researchers, as a means to foster the pursuit of scientific research and advancement of knowledge

Research element

The aim of this module is to provide students with professional research skills through an extended period of practice
in an industrial setting. Students will develop a hypothesis-driven research project, collect and analyse data and report the data in a written and oral format.

Subject specific skills

By the end of this module the student should have developed fundamental research skills that include:

- ability to conceptualize hypotheses and design experiments to test them.
- ability to demonstrate mastery of technical skills appropriate to the discipline of the research.
- ability to present research in a written format that is consistent with the standards of the discipline of the research.
- ability to present research in an oral presentation.
- ability to articulate and navigate scientific discussions.
- ability to critically analyze data and draw scientifically-valid conclusions.

Transferable skills

The subject specific skills align with those required to develop research in a professional setting.

Study

Study time

Type	Required
Lectures	3 sessions of 1 hour 30 minutes (0%)
Seminars	12 sessions of 1 hour (1%)
Project supervision	20 sessions of 1 hour (2%)
Private study	868 hours (96%)
Total	904.5 hours

Private study description

No private study requirements defined for this module.

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	Eligible for self-certification
Research Paper	60%		No
Students will report their results in a research article format, following specified guidelines and adhering to word limits and formatting requirements.			
Oral Presentation	20%		No
Students will give an oral presentation on their project results as part of a minisymposium.			
Project Performance	20%		No
Project supervisors grade performance of the student, their level of engagement and capacity to develop research.			

Assessment group R

	Weighting	Study time	Eligible for self-certification
module not re-assessed	100%		No

Feedback on assessment

Students will obtain feedback through individual discussions with their academic supervisor.

Dissertations and oral presentations will be marked independently by the academic supervisor and

by one other member of academic staff within the department. The project performance mark will be allocated by the academic supervisor based on a questionaire and discussion with the placement supervisor and discussions with the student and supervisor during the visit to the placement area. Feedback provided by the students' placement supervisor will inform the marking process but final marking decisions will remain with the academic department. Students' oral presentations will be recorded in order to make the presentations available to the external examiners.

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)