

LF408-90 MBio Research Project (In House)

24/25

Department

Life Sciences

Level

Undergraduate Level 4

Module leader

Christopher Rodrigues

Credit value

90

Module duration

52 weeks

Assessment

Multiple

Study location

University of Warwick main campus, Coventry

Description

Introductory description

MBio Research Project (In House)

Module aims

The aim of this module is to provide students with professional research skills through an extended period of academic work.

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 carry out an extended research project. The research may be either laboratory or field-based, or may involve Bioinformatic or Systems Biology analyses. Students will choose projects from a list of projects based on ongoing departmental research programmes. The student will have a discrete project and, after appropriate training, be involved in design, analysis and execution of all appropriate experimental work. Project supervisors will be responsible for

instruction and training on a day-to-day basis.

The project will run over 35 weeks, which will include 28 weeks of data acquisition and/or analysis, 5 weeks of write-up in the form of a research paper, and 2 weeks for preparation of a short seminar on their project.

Learning outcomes

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

- ability to present research both orally and in written format, in a manner that is consistent with scientific research practice
- ability to plan, conceptualize and execute experimental approaches that lead to scientific data collection
- the ability to 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 academic 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 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	863 hours 30 minutes (96%)
Total	900 hours

Private study description

Research

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 as part of a mini-symposium.			
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 questionnaire. 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-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)