

BS341-30 Research Project

22/23

Department

Life Sciences

Level

Undergraduate Level 3

Module leader

Daniel Franklin

Credit value

30

Module duration

30 weeks

Assessment

Multiple

Study location

University of Warwick main campus, Coventry

Description

Introductory description

The Y3 research project is a capstone module, in which students bring together all the research and practical skills they have been taught in Y1-3 teaching laboratories and the tutorial program. Students are assigned a project and have to produce a 10,000 word thesis.

Module aims

The aim of the module is to give students the opportunity to utilise the research and evaluation skills developed throughout years 1,2,and 3 in order to produce a substantial piece of research.

- Students complete a seminar based on their research project aimed at an educated lay audience.
- Students complete a research project which includes:
 1. A high quality scientific literature review of their chosen research field.
 2. Critical appraisal of source material- (including use of statistical knowledge covered during Year 1, 2 and 3 to appraise and evaluate published data)
 3. Construction of scientific arguments based on multiple sources
 4. Production of a scientific abstract
 5. Production of a discussion and conclusion which include evidence of independent thought

and reasoning

6. Evidence of reflective practice (in the form of a longitudinal project diary)

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.

1. A high quality scientific literature review of their chosen research field.
2. Critical appraisal of source material- (including use of statistical knowledge covered during Year 1, 2 and 3 to appraise and evaluate published data)
3. Construction of scientific arguments based on multiple sources
4. Production of a scientific abstract
5. Production of a discussion and conclusion which include evidence of independent thought and reasoning
6. Evidence of reflective practice (in the form of a longitudinal project diary)

Learning outcomes

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

- O1: Plan and engage in an independent and sustained critical investigation and evaluation of a chosen research topic
- LO2: Research and present an oral seminar presentation on the project topic
- LO3: Identify and appraise relevant scientific literature using on-line literature search engines, relate this to appropriate methodologies and draw appropriate conclusions
- LO4: Critically review relevant research papers
- LO5: Demonstrate critical appraisal
- LO6: Effectively construct scientific results and arguments, using multiple sources.

Research element

Critical appraisal of source material- (including use of statistical knowledge covered during Year 1, 2 and 3 to

appraise and evaluate published data)

Construction of scientific arguments based on multiple sources

Production of a scientific abstract

Production of a discussion and conclusion which include evidence of independent thought and reasoning

Evidence of reflective practice (in the form of a longitudinal project diary)

Subject specific skills

Critical appraisal of source material- (including use of statistical knowledge covered during Year 1, 2 and 3 to

appraise and evaluate published data)

Construction of scientific arguments based on multiple sources

Production of a scientific abstract

Production of a discussion and conclusion which include evidence of independent thought and reasoning

Evidence of reflective practice (in the form of a longitudinal project diary)

Transferable skills

1. Critical appraisal of source material
 2. Self directed learning
 3. Adult learning
-

Study

Study time

| Type | Required |
|---------------------|---------------------------|
| Lectures | 2 sessions of 1 hour (1%) |
| Project supervision | 8 sessions of 1 hour (3%) |
| Private study | 290 hours (97%) |
| Total | 300 hours |

Private study description

Independent study, covering research, background reading and data analysis- work culminates in production of a 10,000 word thesis and a 15 min research seminar presentation

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 |
|---|-----------|------------|
| Research Project Dissertation 10,000 word thesis | 64% | |
| Research Seminar | 20% | |

| | Weighting | Study time |
|--|------------------|-------------------|
|--|------------------|-------------------|

15 min seminar presentation

| | | |
|---------------------|-----|--|
| Project performance | 16% | |
|---------------------|-----|--|

Assessment group R

| | Weighting | Study time |
|--|------------------|-------------------|
|--|------------------|-------------------|

| | | |
|---|------|--|
| Research Project Thesis 10,000 word thesis | 100% | |
|---|------|--|

Feedback on assessment

Individual written feedback for both seminar and dissertation.

Availability

Courses

This module is Core for:

- Year 3 of UBSA-C700 Undergraduate Biochemistry
- ULFA-C1A2 Undergraduate Biochemistry (MBio)
 - Year 3 of C1A2 Biochemistry
 - Year 3 of C700 Biochemistry
- Year 4 of ULFA-C702 Undergraduate Biochemistry (with Placement Year)
- Year 3 of ULFA-C1A6 Undergraduate Biochemistry with Industrial Placement (MBio)
- UBSA-3 Undergraduate Biological Sciences
 - Year 3 of C100 Biological Sciences
 - Year 3 of C100 Biological Sciences
- Year 3 of ULFA-C1A1 Undergraduate Biological Sciences (MBio)
- Year 4 of ULFA-C113 Undergraduate Biological Sciences (with Placement Year)
- Year 3 of ULFA-C1A5 Undergraduate Biological Sciences with Industrial Placement (MBio)
- UBSA-C1B9 Undergraduate Biomedical Science
 - Year 3 of C1B9 Biomedical Science
 - Year 3 of C1B9 Biomedical Science
 - Year 3 of C1B9 Biomedical Science
- ULFA-C1A3 Undergraduate Biomedical Science (MBio)
 - Year 3 of C1A3 Biomedical Science
 - Year 3 of C1B9 Biomedical Science
- Year 3 of ULFA-C1A7 Undergraduate Biomedical Science with Industrial Placement (MBio)
- ULFA-CB18 Undergraduate Biomedical Science with Placement Year
 - Year 4 of CB18 Biomedical Science with Placement Year
 - Year 4 of CB18 Biomedical Science with Placement Year

- Year 4 of CB18 Biomedical Science with Placement Year
- Year 3 of ULFA-B140 Undergraduate Neuroscience (BSc)
- Year 3 of ULFA-B142 Undergraduate Neuroscience (MBio)
- Year 3 of ULFA-B143 Undergraduate Neuroscience (with Industrial Placement) (MBio)

This module is Core optional for:

- UIPA-C1L8 Undergraduate Life Sciences and Global Sustainable Development
 - Year 3 of C1L8 Life Sciences and Global Sustainable Development
 - Year 3 of C1LA Life Sciences and Global Sustainable Development: Biological Sciences
 - Year 3 of C1LB Life Sciences and Global Sustainable Development: Ecology
- Year 4 of UIPA-C1L9 Undergraduate Life Sciences and Global Sustainable Development (with Intercolated Year)