

Research Project – Advanced Investigations

Module Code:	CFS7023-E
Academic Year:	2018-19
Credit Rating:	60
School:	School of Chemistry and Biosciences
Subject Area:	Chemistry and Forensic Science (ceases 2016)
FHEQ Level:	FHEQ Level 7 (Masters)

Pre-requisites:

Co-requisites: Research Project – Preparatory Investigations 2018-19

Contact Hours

Type	Hours
Seminar	6
Laboratory	300
Directed Study	294

Availability Periods

Occurrence	Location/Period
BDA	University of Bradford / Semester 3 (June - Oct)

Module Aims

This module will extend students' research skills in a research setting. The production of a report and research paper to disseminate the results of the project is a major aim of this module. Students will also develop skills in the oral presentation of their work in a research seminar.

Outline Syllabus

Students will be given an introduction to science publishing, with support from library staff and the learner development unit in scientific writing.

Students will discuss the results of their project with their supervisor, and will interpret

associated data. The supervisor will help the student draw conclusions from their work, and will provide guidance in the preparation of the final written and oral reports.

Module Learning Outcomes

On successful completion of this module, students will be able to...

- 1 Rationalise results from experiments
- 2 Place their work within the context of previously reported work
- 3 Draw conclusions on their research and present suggestions for further work
- 4 Interpret experimental data
- 5 Present results of experimental work in a scientifically rigorous way
- 6 Give an oral presentation
- 7 Produce reports in a format appropriate to publication

Learning, Teaching and Assessment Strategy

Lectures will be used to deliver background information on the peer-review process and the process of publishing science. Students are expected to devote a significant period of time to their project. This is individual work on an original piece of research. The student is required to work independently on their project, and to seek advice or practical help when appropriate, with regular communication with their project supervisor(s).

The students' supervisor will provide guidance on data collection, data analysis, discussion, summarising of findings and writing up of the final dissertation and associated research paper.

Additional support will be provided by members of the technical staff. This will be achieved through formal tutorial meetings with supervisor(s) (8 recommended) and other supervised activities appropriate to the research method employed. Individual supervision will allow the student the opportunity to discuss their ideas, concerns and progress.

Structured sessions will be given on the scientific writing process, to cover peer review and writing journal articles.

The assessment pieces for this module are directly related to the main learning outcomes – the ability to disseminate research results.

There are two closely related pieces of assessment for this module, each of which will cover an important aspect of the dissemination of scientific research.

Assessment 1:

A research seminar to be delivered to peers and staff. In this oral presentation students will

set their work in context and discuss their key results, before drawing conclusions.

Assessment 2:

A dissertation. A formal report of the work undertaken in the research project, placing the results in context with previously published research in the area. Students will also be asked to present their results in the form of a short communication written in journal format.

Mode of Assessment

Type	Method	Description	Length	Weighting	Final Assess'
Summative	Presentation	Oral presentation to place the project in context and present key findings.	20 minutes	20%	Yes
Summative	Dissertation or Project Report	Dissertation – Presentation of results and discussion, and experimental section; preparation of draft manuscript in the style appropriate for journal submission.	-10000 words	80%	No

Legacy Code (if applicable)

Reading List

To view Reading List, please go to [rebus:list](#).