

Module Details	
Module Title	Research Project - Advanced Investigations
Module Code	CFS7023-E
Academic Year	2022/3
Credits	60
School	School of Chemistry and Biosciences
FHEQ Level	FHEQ Level 7

Contact Hours	
Type	Hours
Seminars	6
Laboratories	300
Directed Study	294

Availability	
Occurrence	Location / Period
BDA	University of Bradford / Semester 3

Module Aims
This module will extend students research skills in an applied 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.

Learning Outcomes	
Outcome Number	Description
01	Rationalise results from experiments
02	Place their work within the context of previously reported work
03	Draw conclusions on their research and present suggestions for further work
04	Interpret experimental data
05	Present results of experimental work in a scientifically rigorous way
06	Give an oral presentation
07	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	Weighting
Summative	Dissertation or Project Report	Dissertation ? Presentation of results and discussion, and experimental section; preparation of draft manuscript in the	80%
Summative	Presentation	Oral presentation (20 minutes) to place the project in context and present key findings.	20%

Reading List
To access the reading list for this module, please visit https://bradford.rl.talis.com/index.html

Please note:

This module descriptor has been published in advance of the academic year to which it applies. Every effort has been made to ensure that the information is accurate at the time of publication, but minor changes may occur given the interval between publishing and commencement of teaching. Upon commencement of the module, students will receive a handbook with further detail about the module and any changes will be discussed and/or communicated at this point.

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