

Module Details	
Module Title	Research Project - Preparatory Investigations
Module Code	CFS7022-B
Academic Year	2021/2
Credits	20
School	School of Chemistry and Biosciences
FHEQ Level	FHEQ Level 7

Contact Hours	
Type	Hours
Lectures	4
Seminars	1
Laboratories	120
Directed Study	75

Availability	
Occurrence	Location / Period
BDA	University of Bradford / Semester 2

Module Aims
This module is designed to provide instruction in specific research related skills required for the proper management and control over the day-to-day operation of a research project. Students will have the opportunity to apply chemical knowledge and laboratory skills in a practical research project. Students will also develop their skills in providing constructive feedback to their peers.

Outline Syllabus
Students will: be introduced to the concept of peer-review, and will provide feedback on a selected project proposal; commence work on the research project that they developed with their project supervisor; be guided in strategically planning their experimental work (Gantt Chart); carry out all appropriate COSHH assessments for all stages of their practical work; source and access relevant published work; be required to meet with their project supervisor regularly to discuss interim reports and to propose the next steps in the project. Instruction will be given by library staff in critical reading of the scientific literature. At the end of the module students will write an introduction to their research project. An interim presentation of results and future work will be given in the form of a presentation to staff and peers.

Learning Outcomes	
Outcome Number	Description
01	Select and use appropriate research equipment without supervision
02	Critically evaluate previous work in their area of research.
03	Critically evaluate a research proposal.
04	Independently prepare COSHH and related health and safety documentation.
05	Provide constructive feedback to peers.
06	Reflect on feedback given by peers.
07	Present results in a poster presentation.

Learning, Teaching and Assessment Strategy
Lectures will be used to deliver background information on the further study skills required to critically engage with the primary literature. Students are expected to devote 120 hours (10 hours per week) to their research project in the form of laboratory-based practical training and undertaking preliminary experiments. This is individual work on an original piece of research. The student is required to work independently on their project, to seek advice or practical help when appropriate, with regular communication with their project supervisor(s). The student will be allocated a supervisor(s) who will provide practical training and support as well as guidance throughout the project in areas such as: data collection, data analysis, discussion, summarising of findings and presentation of results. Additional support will be provided by members of the technical staff. Supervision will be achieved through formal tutorial meetings with supervisor(s) (6 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. Instruction on how to critically engage with the scientific literature will be given by library staff in lectures and workshops. At the beginning of the module students will peer-review a sample project plan and provide feedback. Students will be graded on the quality and usefulness of this feedback. Students will also be asked to reflect on the feedback given by peers. At the end of the module students will submit a literature review for formative assessment. This will then form part of the introduction in the final dissertation. An interim report on progress made in the project will be given in the form of a presentation.

Mode of Assessment			
Type	Method	Description	Weighting
Summative	Coursework - Written	Provide feedback on a research proposal. (1000 words)	20%
Summative	Presentation	Presentation	30%
Summative	Coursework - Written	An introduction to the research project, place the students work in context within the scientific literature (2000 wd)	50%

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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