

PROJ S8009: Project Planning and Design

Module Details	
Module Code:	PROJ S8009
Full Title:	Project Planning and Design APPROVED
Valid From::	Semester 1 - 2022/23 (September 2022)
Language of Instruction:	English
Duration:	1 Semester
Credits::	7.5
Module Owner::	Valerie McCarthy
Departments:	Life and Health Sciences
Module Description:	The aim of this module is to equip students with the knowledge and skills to conduct applied research on an environmental topic and to interpret and synthesise existing research to inform a body of independent research. The students will develop their skills in acquiring, integrating and communicating scientific knowledge. The student will be asked to develop a comprehensive project plan the aim and tasks associated with the completion of a research based topic.

Module Learning Outcome	
On successful completion of this module the learner will be able to:	
#	Module Learning Outcome Description
MLO1	Critically interpret and evaluate existing research evidence to inform new (potential) research and experimental design.
MLO2	Critically interpret and analyse newly obtained research evidence in a defined subject area and evaluate its relevance within the Environmental sector.
MLO3	Identify and summarise information from the literature on a defined scientific topic in their own words and communicate the underlying concepts in a particular field of science.
MLO4	Evaluate appropriate qualitative and quantitative data collection techniques and demonstrate a creative approach to problem identification and the development of solutions.
Pre-requisite learning	
Module Recommendations <i>This is prior learning (or a practical skill) that is strongly recommended before enrolment in this module. You may enrol in this module if you have not acquired the recommended learning but you will have considerable difficulty in passing (i.e. achieving the learning outcomes of) the module. While the prior learning is expressed as named DkIT module(s) it also allows for learning (in another module or modules) which is equivalent to the learning specified in the named module(s).</i>	
No recommendations listed	

Module Indicative Content	
Research Project Students in consultation with their supervisor will identify a research topic, which may be research-based problems from industry or specific interests to the individual student. Once assigned, supervisors can commence meetings with students and milestones can be agreed for the delivery of project components. The supervisor will continue to meet with the assigned student and record progress by maintaining a record of meetings. The student will critically review the relevant literature and use this to develop practical and appropriate methodologies which will be developed and applied throughout the project. The supervisor/mentor and student will identify and frame a scientific questions together which will become the focus of the project. Each student will collect, collate, review and present information from the literature on the defined topic of their project. If possible, the project planning and design module can form the basis for the 4th year Research Project (Environmental Bioscience Project 1 & 2 modules). If this happens, student supervision hours will be 'split' between EB3 semester 2 (0.5 hr per week) and EB4 semester 1 (0.5 hr per week), instead of the listed EB4 semester 1 (1 hr per week). Tutorial Sessions Weekly Tutorials are provided to the student groups to facilitate enhancing their experience and performance in the literature project. Topics covered include the following: An overview to the online sources available to DkIT students. This tutorial takes place in the library and outlines the books, journals and articles available through the electronic portals. Students are also given guidelines on using sciencedirect.com and pubmed.com. In addition, the college's eBrary is outlined. Harvard referencing: An overview of the college's preferred referencing system is provided in addition to a short tutorial on how the EndNote Web/Mendeley software can make referencing an easy task is performed. This tutorial takes place in the library. Evaluation of literature and its use in the Literature Review. Structuring a literature review, the importance of preparing and presenting a plan. Science writing skills - avoiding common pitfalls. Presentation skills - students are presented with guidelines on structuring a powerpoint presentation in addition to receiving advice on delivering a presentation to a group. Recommended electronic tools. For example, using Microsoft Word to prepare your table of contents, perform spelling/grammar checks as you work while also linking with referencing software. Plagiarism - an interactive overview of plagiarism and how it is identified through software such as 'Turnitin'. Sample Project Titles Investigating heavy metal accumulation in <i>Mytilus edulis</i>; An investigation into groundwater quality in domestic wells in karst and shale regions; a biological study of subterranean fauna distribution; Biological recovery of contaminated waters: an in house wetlands trial; A study of ecosystem development in Integrated Constructed Wetlands in the treatment of urban and domestic wastewater discharges; Metal accumulation in macroinvertebrates in the Avoca Mining region; Microbiological analysis (<i>E. coli</i>, Total Coliforms and <i>Cryptosporidium</i>) of drinking water supplies. Metal accumulation in bryophytes in contaminated mine sites; Lichens as an indicator of air quality in urban areas; The impact of field margins on the biodiversity of streams.	
Module Assessment	
Assessment Breakdown	%
Course Work	100.00%
Module Special Regulation	

Assessments

Full Time On Campus			
Course Work			
Assessment Type	Written Report	% of Total Mark	60
Marks Out Of	0	Pass Mark	0
Timing	n/a	Learning Outcome	1,3
Duration in minutes	0		
Assessment Description Students will submit a comprehensive referenced literature review on a selected project topic. Each Literature Review will be assessed by the project supervisor and one other member of the programme team.			
Assessment Type	Written Report	% of Total Mark	40
Marks Out Of	0	Pass Mark	0
Timing	n/a	Learning Outcome	1,2,4
Duration in minutes	0		
Assessment Description Plan of work: the student will submit a work plan, including objectives and a timeline as a Gantt chart, for a research project. Where feasible projects which include links to on-going funded research projects, to industry and to local stakeholders, including links to communities will be encouraged. The plan should include reference to the methods to be employed in the practical component. The report will be assessed by the supervisor and one other member of the programme team.			
No Project			
No Practical			
No Final Examination			
Reassessment Requirement			
No repeat examination <i>Reassessment of this module will be offered solely on the basis of coursework and a repeat examination will not be offered.</i>			

Module Workload

Workload: Full Time On Campus

<i>Workload Type</i>	<i>Contact Type</i>	<i>Workload Description</i>	<i>Frequency</i>	<i>Average Weekly Learner Workload</i>	<i>Hours</i>
Tutorial	Contact	Project co-ordinator delivered tutorials on scientific writing, research methods, presentation skills.	Every Week	1.00	1
Independent Study	Non Contact	Project development and independent learning	Every Week	10.00	10
				Total Weekly Learner Workload	11.00
				Total Weekly Contact Hours	1.00

This module has no Part Time On Campus workload.

Module Resources
<i>Recommended Book Resources</i>
Bell, Judith. (2005), <i>Doing your Research Project: A guide for the first-time researchers in education, health and social science</i>, 4th. Open University Press, Maidenhead, UK, [ISBN: 9780335215041].
<i>Supplementary Book Resources</i>
Ruzton, G.D. and Golegrave, N.. (2006), <i>Experimental Design for the Life Sciences</i>, 2nd. Oxford Press. Oliver, Paul. (2008), <i>Writing your thesis</i>, 2008. SAGE, [ISBN: 1412946891].
<i>This module does not have any article/paper resources</i>
<i>This module does not have any other resources</i>