

ENVR S8018: Environmental Bioscience Project 1

Module Details	
Module Code:	ENVR S8018
Full Title:	Environmental Bioscience Project 1 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:	<p>This module will provide an opportunity for students to integrate their knowledge and practical skills and develop them through practical research on a selected topic. This will require the student to demonstrate conceptual and critical thinking skills, present and justify the methodology, analyse data and draw appropriate conclusions and communicate their work to a critical audience. This module should foster independence, confidence and a sense of personal responsibility for the work executed.</p> <p>This module is directly linked to the ENVR S8021 (Environmental Biosciences Project 2) module in semester 2. These modules should be seen as a single year-long module.</p>

Module Learning Outcome	
On successful completion of this module the learner will be able to:	
#	Module Learning Outcome Description
MLO1	Apply knowledge and practical skills in the research of a specific aspect of biological environmental assessment or management.
MLO2	Source, develop and validate laboratory methods and protocols.
MLO3	Employ advanced data analysis and synthesis techniques within the scope of the project.
MLO4	Maintain detailed records of project-based activities and present the results of the research in high-quality oral formats.
MLO5	Critically interpret and synthesise research evidence collated in the laboratory and/or field and apply it to the relevant and appropriate scientific literature.
MLO6	Be able to present and disseminate scientific literature at a professional level that is suitable for both the scientific community and other key stakeholders.
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 Research Students will be provided with 3 X 8 hour supervised laboratory sessions over a period of six weeks for the execution of their project. Students will meet with their project supervisor for approximately one hour per week to discuss the progress of the work, data analysis and preparation of the oral presentation. Students must maintain a laboratory notebook in which they should record thoughts, plans, methods, raw data, calculations and other details of practical activities during the course of the project. During weekly meetings, the project supervisor may add remarks or suggestions to the laboratory notebook. Students must perform and defend a 10-minute oral presentation of their work at the end of the semester. If possible, the project planning and design module (year 3 semester 2) 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).

Module Assessment	
Assessment Breakdown	%
Course Work	100.00%
Module Special Regulation	

Assessments

Full Time On Campus

Course Work			
Assessment Type	Presentation	% of Total Mark	20
Marks Out Of	0	Pass Mark	0
Timing	End-of-Semester	Learning Outcome	1,3,5,6
Duration in minutes	0		
Assessment Description The student will present a summary of the work which they conducted over the course of the semester, it will include a detailed overview of the methodologies employed, results obtained over the course of the project and critical synthesis and interpretation of the data obtained. Each presentation will be assessed by a team of supervisors, who will conduct a detailed oral examination of the student to assess their critical insight into the work which has been conducted.			
Assessment Type	Performance Evaluation	% of Total Mark	20
Marks Out Of	0	Pass Mark	0
Timing	End-of-Semester	Learning Outcome	1,2,4
Duration in minutes	0		
Assessment Description The supervisor will evaluate the students performance during the course of the project and will issue a report. This will be based on criteria such as attendance, diligence, motivation, and initiative, as well as field and laboratory skills, health and safety, and problem solving skills. The students field and laboratory notes will be assessed as part of the supervisors report.			
Assessment Type	Written Report	% of Total Mark	60
Marks Out Of	0	Pass Mark	0
Timing	n/a	Learning Outcome	1,2,3,5,6
Duration in minutes	0		
Assessment Description Project thesis: The student will be required to submit a comprehensive thesis/draft paper suitable for publication in a scientific journal based on their methodology, results data analysis and conclusions using an approved format. 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 Reassessment of this module will be offered solely on the basis of coursework and a repeat examination will not be offered.			

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>
Lecturer Supervised Learning	Contact	Meeting with supervisor	Every Week	1.00	1
Practical	Contact	Laboratory and Field Work which will be conducted in a block over a six week period consisting of 3 day long sessions.	Every Week	12.00	12
				Total Weekly Learner Workload	13.00
				Total Weekly Contact Hours	13.00

This module has no Part Time On Campus workload.

Module Resources

Recommended Book Resources

Ruzton, G.D. and Golegrave, N.. (2006), Experimental Design for the Life Sciences, 2nd. Oxford Press.

Judith Bell. (2005), Doing your Research Project: A guide for first-time researchers in education, health and social science, 4th. Open University Press, Maidenhead, UK, [ISBN: 9780335215041].

This module does not have any article/paper resources

Other Resources

Website, Useful weblinks related to How to do a Research Project (Colin Robson), Blackwell. blackwell publishing,
<http://www.blackwellpublishing.com/researchproject/weblinks.asp>