

**PROJ S9002: Food and Feed Biotechnology
Project**

Module Details	
Module Code:	PROJ S9002
Full Title:	Food and Feed Biotechnology Project APPROVED
Valid From::	Semester 1 - 2019/20 (June 2019)
Language of Instruction:	English
Duration:	1 Semester
Credits::	30
Module Owner::	Edel Healy
Departments:	Unknown
Module Description:	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.

Module Learning Outcome	
On successful completion of this module the learner will be able to:	
#	Module Learning Outcome Description
MLO1	Critically interpret and synthesise research evidence in a defined subject area and apply it to a new area of scientific study within Food or Animal Feed Biotechnology.
MLO2	Evaluate appropriate qualitative and quantitative data collection techniques and demonstrate a creative approach to problem identification and the development of solutions.
MLO3	Assess, develop and demonstrate the use of specialist research methodologies and apply to a specific research area.
MLO4	Justify in a consistent manner a conceptual understanding of the research conducted and draw independent conclusions based on a rigorous, analytical and critical approach to information.
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. Students undertake the research elements of this module during Semester 1 and Semester 2 and complete the write up of the thesis over the summer period. It is anticipated that the projects can be completed within 12 months for full time students and 24 months for part-time students. The supervisor will guide the student through the process of completing the research project, by advising on research approaches, milestones, appropriateness of material, analysis and critical evaluation, writing techniques and project management. The project will be assessed on its quality of enquiry, analysis, interpretation, insight and exposition, as well as the contribution it makes to the field of study and the writer's own academic and professional development. The student will be expected to master a technical body of knowledge and apply it to a given problem area. The ability to think and reason at a conceptual level is crucial. The design, layout, quality of expression, structure and coherence of all documentation will be of relevance to the completed thesis. The ability of the student to present and defend the material is also of significant importance.	
Sample Titles Animal Feed: Role of rumen microbiome in the efficiency of nutrient utilization and methane production; Feed digestion and availability of nutrition from feed; Modification of diet composition for improved meat quality. Food: Development of molecular assays for the detection of GM foods; Assessment of nutritional value of GM foods using advanced analytical techniques; Development of GM enzymes for improved food production by site-directed mutagenesis.	
Module Assessment	
Assessment Breakdown	%
Course Work	100.00%
Module Special Regulation	

Assessments

Full Time On Campus			
Course Work			
Assessment Type	Other	% of Total Mark	80
Marks Out Of	0	Pass Mark	0
Timing	n/a	Learning Outcome	1,2,3,4
Duration in minutes	0		
Assessment Description Students will produce a formal academic thesis, typically 13,000 (+/- 3000) words, which will summarise methodologies, results, data analysis and conclusions using an approved format.			
Assessment Type	Presentation	% of Total Mark	20
Marks Out Of	0	Pass Mark	0
Timing	n/a	Learning Outcome	2,3
Duration in minutes	0		
Assessment Description The student will be asked to present the project findings to the entire supervisory team. In addition, the student will be asked to submit an extended abstract to accompany their presentation, which appropriately summarises the content of the project thesis.			
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
Independent Study	Non Contact	Project Development and independent learning	Every Week	11.00	11
Practical	Contact	Laboratory Practical Sessions. These may be in a Science or Computer Laboratory and may be timetabled as blocked sessions depending on the student profile.	Every Week	3.00	3
				Total Weekly Learner Workload	15.00
				Total Weekly Contact Hours	4.00

This module has no Part Time On Campus workload.

Module Resources
<i>Recommended Book Resources</i>
Bell, Judith. (2005), Doing your Research Project: A guide for the first-time researchers in education, health and social science, 4th. Open University Press, Maidenhead, UK, [ISBN: 9780335215041]. Ruzton, G.D. and Golegrave, N.. (2006), Experimental Design for the Life Sciences, 2nd. Oxford Press. Oliver, Paul. (2008), Writing your thesis, 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>