

PROJ S8010: Literature Research Project

Module Details	
Module Code:	PROJ S8010
Full Title:	Literature Research Project APPROVED
Valid From::	Semester 1 - 2020/21 (September 2020)
Language of Instruction:	English
Duration:	1 Semester
Credits::	5
Module Owner::	Ronan Bree
Departments:	Unknown
Module Description:	• To provide students with an opportunity to advance their knowledge of a particular topic on their programme; • To develop further their skills in acquiring, integrating and communicating scientific knowledge. • To develop students' self-motivation, creativity, independent thinking and time-keeping skills • To foster confidence and a sense of personal responsibility for their work.

Module Learning Outcome	
On successful completion of this module the learner will be able to:	
#	Module Learning Outcome Description
MLO1	Identify and summarise information from the literature on a defined scientific topic in their own words.
MLO2	Communicate the underlying concepts in a particular field of science.
MLO3	Interpret, evaluate and critically discuss the findings of their work with reference to the literature.
MLO4	Conclude their own views on key issues in the chosen area, including suggestions where possible useful work might be done in the future.
MLO5	Organise their work in the form of a written dissertation and oral presentation.
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
Learning and Teaching methods Students will carry out an individual, desk-based (non-experimental) study on a topic of relevance to their programme, under the supervision and guidance of a lecturer as a 'mentor'. The mentor and student will identify and frame a scientific question together which will become the focus of the literature project. Students will aim to meet with their supervisor for 20 minutes per week to discuss the planning and progress of the project. They will also attend a one-hour 'communications for scientists' tutorial in most weeks of the semester on a variety of topics related to the process and communication of research. At week 6 of the teaching term, the students perform an oral presentation of the literature research and findings to date. The work will finally be submitted during teaching week 12/13 of the term as a typed Literature Review (5,000 ± 500 words). Students will be informed that 'Turnitin' or some other plagiarism-search software will be used to assess their work. The Departmental Plagiarism committee will review any cases of plagiarism identified, however as the students are in their award year and are guided on the issue, this is not expected to occur. Students will be given semi-formal feedback on their performance and draft submissions during the semester from their mentor to assist with their on-going personal and professional skill development. Communications for Scientists - Weekly Tutorials Tutorials are provided weekly to the student groups to facilitate enhancing their experience and performance in the literature project. Topics covered include the following: * An overview of the module, explaining the roles of all involved. Due dates and submission requirements are also outlined. * Sourcing literature electronically: An overview to the online sources available to DkIT students. This tutorial takes place in collaboration with 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 eBray is outlined. * Harvard referencing: An overview of the college's preferred referencing system is provided in addition to a short tutorial on how the Mendeley software can make referencing an easy task is performed. Again this tutorial is co-delivered with 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'. The importance of writing in your own words is presented. * People communication skills, personality profiles, working in a team, CV and interview Skills are also covered. Internationalisation Students will be encouraged to utilise international peer-reviewed journals and publications in addition to international society, and news, resources during their research. eLearning Exercises Students will have access to a virtual learning environment (VLE) where they can perform formative assessments in punctuation, the use of paragraphs and referencing for example. The VLE will also provide the students with access to DkIT's Harvard Referencing Resource and also a guideline document to Academic Writing. Articles and YouTube video clips that may assist students in their literature projects will also be posted to the VLE. Students will have 24/7 access to the VLE allowing them to download and study at their own pace and in their own time. This will facilitate learning and understanding for all students, but in particular the international students who may not possess fluent English. Other e learning resources Students will engage with online search engines for peer-reviewed literature (e.g. www.sciencedirect.com / www.pubmed.com / DKIT multiseach). The Literature Review submission will be created electronically using Microsoft Word while the students' presentations are performed using Microsoft PowerPoint. The online referencing manager 'Mendeley' will be demonstrated to the class in order to assist with collation/storage of peer reviewed articles in addition to helping adhere to the DKIT Harvard Referencing Guide. Sample Project Titles: • A feasibility study on the use of coppice willow chips as a bio-filtration medium. • Assessment of the feasibility of using human urine as a liquid fertiliser in a closed-loop hydroponics system. • A comparative assessment of methods used for the determination of protein concentration. • A comparison of the physical, chemical and therapeutic properties of anti-hypertension drugs. • MRSA: the how, why and where can we possibly go from here? • A discussion on the discovery, development and worldwide social impact of the penicillin group of antibiotics. • Malaria: the greatest scourge of mankind. • Phytochemicals: the role of plant extracts in human medicine from ancient times to the present. • The use of Genetically Modified Organisms (GMO) for the development of therapeutic agents. • Genetically Modified Organisms (GMO): safety, use and public opinion. • Impact of the Human Genome Project on the development of novel, therapeutic agents. • Use of animal models in basic research. • The search for antibody based treatments for HIV infections. • Alzheimers - a degenerative condition • Immunotherapy in cancer treatment

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	70
Marks Out Of	0	Pass Mark	0
Timing	S1 Week 12	Learning Outcome	1,2,3,4,5
Duration in minutes	0		
Assessment Description In week 12 of the semester's schedule, students will submit their 5,000 word (+/- 500 words) Literature Review on their chosen topic. This document will be the final submission however throughout the term, mentors will be meeting with their assigned students to monitor progress and set deadlines for draft revisions etc. In parallel throughout the entirety of the module, a tutorial series will be running to assist students in developing their academic writing and presentation skills.			
Assessment Type	Presentation	% of Total Mark	30
Marks Out Of	0	Pass Mark	0
Timing	S1 Week 13	Learning Outcome	1,2,5
Duration in minutes	0		
Assessment Description During week 13 of the teaching semester, students will provide an overview of their literature findings and research in the form of an oral presentation (note this may take place remotely or via screencast). This literature review presentation will be assessed by a sub-team of the mentors and will be followed by a brief questions and answer session.			
No Project			
No Practical			
No Final Examination			

Module Workload

Workload: Full Time On Campus

Workload Type	Contact Type	Workload Description	Frequency	Average Weekly Learner Workload	Hours
Tutorial	Contact	Project co-ordinator delivered tutorials on scientific writing, research methods, presentation skills in addition to communications, careers preparations, CV generation tips and interview skills.	Every Week	1.00	1
Lecturer-Supervised Learning (Contact)	Contact	Meeting with mentor	Every Week	0.33	0.33000001311302185
Independent Study	Non Contact	Sourcing, reading and evaluating published works will be performed in addition to working towards the Literature Review drafts/ final document and oral presentation.	Every Week	6.67	6.6700000762939453
Total Weekly Learner Workload					8.00
Total Weekly Contact Hours					1.33

This module has no Part Time On Campus workload.

Module Resources

Recommended Book Resources

Denscombe, M.. (2010), The Good Research Guide, 4. Open University Press,.

Louis Cohen, Lawrence Manion & Keith Morrison. (2011), Research Methods in Education, 6th (2007) 7th (2011). Routledge.

Martha Davis, Kaaron Joann Davis, Marion Dunagan. (2012), Scientific Papers and Presentations : Navigating Scientific Communication in Today's World, 3. Academic Press.

Day, Robert A.. (2011), How to write and publish a scientific paper, 7th. Santa Barbara, Calif. : Greenwood,.

Robert A. Day And Nancy Sakaduski. (2011), Scientific English : A Guide for Scientists and Other Professionals, 3. Greenwood Publishing Group.

James G. Speight. (2012), Clear and Concise Communications for Scientists and Engineers, CRC Press Inc.

Rose, J.. (2012), The mature student's guide to writing, 2nd (2007) and 3rd (2012). Dalgrows.

Jean-Luc Lebrun. (2007), Scientific writing : a reader and writer's guide, World Scientific Pub Co Pte.

Jennifer Peat et al.. (2002), Scientific writing : easy when you know how, Blackwell Publishing.

Anderson, J. and Poole, M.. (2001), Assignment and Thesis Writing, 4th. Wiley.

Supplementary Book Resources

Salmon, G.. (2003), e-tivities; the key to active on-line learning, Falmer.

Joyce Cox, Joan Lambert. (2010), Microsoft PowerPoint 2010, Microsoft Press.

This module does not have any article/paper resources

Other Resources

eBook collection online with DkIT, Access online textbooks through Dkit's eBook & eBrary (go to DkIT library site to begin).

DkIT library, DkIT Harvard Referencing Guide (available by searching on dkit.ie search tool), DkIT.

DkIT Academic Council, Academic Integrity Policy Document (available by searching on dkit.ie search tool).

Website, Leed's University Library Writing Skills tutorials. http://library.leeds.ac.uk/skills-writin g#activate-different_types_of_academic_w_riting.

Website, Purdue Online Writing Lab (OWL). (2011), <https://owl.purdue.edu/>.