CHEM08028
Project

Full Title	Project		
Status	Uploaded to Banner	**Start Term**	2020
NFQ Level	08	**ECTS Credits**	10
Module Code	CHEM08028	**Duration**	Stage - (26 Weeks)
Grading Mode	Numeric	**Department**	Physical & Life Sciences
Module Author	Cormac Quigley		

Module Description

An independent project is completed by the learner. The project is normally based in an industrial setting under the joint supervision of an academic supervisor and a workplace supervisor. Alternatively, where a workplace project is not appropriate, it may take place within the institute under the supervision of an academic supervisor. This module will help the learner to develop their project management skills, team-working and communication skills and enable them to progress their knowledge by developing the skills required to complete more advanced projects.

	Learning Outcomes ***On completion of this module the learner will/should be able to:***
1.	Source scientific literature and access relevant information through the use of journals, books, abstracts, inter-library loans, the Internet and other electronic media.
2.	Selectively abstract, synthesize and collate relevant information.
3.	Develop a project plan and perform the necessary investigative work.
4.	Select appropriate experimental or other methodologies, and present reasoned argument and draw appropriate conclusions from their research work.
5.	Present a dissertation, and deliver an oral presentation on their project work.
6.	Answer technical and other questions on the work conducted and the project experience

Indicative Syllabus

Completion of an industry-based or laboratory based research project.

Assessment of the relevnace of the chosen topic to the workplace.

A major literature survey on the research topic/area of work experience.

Design and performance of laboratory or other research work, collation of information and preparation of a risk assessment of the work done, if applicable.

Preparation of a written dissertation on the work.

Delivery of an oral presentation on the project work.

For students not completing an industry based project, there will be a focus on readiness to work. Training and resources from the GMIT careers office will also be included within the project where the project is in an academic setting.

Teaching and Learning Strategy

Academic supervisor, and where relevant, industry supervisor assigned to each student. Industry supervisor will report on student performance to academic supervisor to allow assessment of workplace performance.

Development of project management skills.

Development of numerous soft skills, e.g. communication, teamwork, organisational skills, time-management skills, risk assessment skills.

Planning and execution of relevant project work.

Literature Review of research topic.

Self-directed learning.

Assessment Strategy

Workplace performance; maintenance of a Log Book / Laboratory Note Book; This will assess the students ability to maintain records in a timely fashion as well as providing an insight into the ongoing nature of the research undertaken.

Presentation of a written dissertation; This will give the students and opportunity to demonstrate their ability to complete scientific writing and communicate the resutls of their research effectively as well as allowing for assessment of the project they have completed.

Oral presentation. This will give the students a chance to develop their communicaiton and the project team to assess the ability of the student to understand and communicate their work.

The academic supervisor will liaise with the work based supervisor to assess their participation and performance. This will allow for assessment of the quality and scope of the work completed by the student uncluding assessing planning and time management.

Repeat Assessment Strategies

Students who have satisfactorily completed the practical work will be invited to resubmit their dissertation or redo their oral presentation as appropriate. Students who have not satisfactorily completed the research portion of the project may repeat the module at the next available sitting.

Indicative Coursework and Continuous Assessment:		**100 %**		
Form	***Title***	***Percent***	***Week (Indicative)***	***Learning Outcomes***
Oral Exam	Oral Examination	30 %	End of Term	4,5,6
Written Report	Project	30 %	End of Term	1,2,3,5
Performance Evaluation	Project Work	20 %	OnGoing	1,2,3,4,6
Oral Exam	Presentation	20 %	End of Term	1,2,3,4,5,6

Blended Delivery Mode Average Weekly Workload:			**1.33 Hours**		
Type	***Description***	***Location***	***Hours***	***Frequency***	***Weekly Avg***
Online Learning	Project Coordination	Not Specified	1	Weekly	1.00
Supervision	Project Supervision	Not Specified	0.33	Weekly	0.33

Required Reading Book List

Thomas, G., (2017). *How to Do Your Research Project*.
ISBN 1473948878 ISBN-13 9781473948877

Walliman, N., (2020). *Your Research Project*. SAGE Publications Limited.
ISBN 1526441209 ISBN-13 9781526441201

Journal Resources

Specific journals will depend on the chosen research topic, examples include:

Analytical Chemistry (ACS) ISSN: 1520-6882

Analyst (RSC) ISSN 1364-5528

Other Resources

www.webofknowledge.com

www.sciencedirect.com/

Programme Membership

GA_SAACG_L08 202000 Higher Diploma in Science in Advanced Analytical Chemistry