APPROVED

PHAR S8021: Health and Safety for the (Bio) Pharmaceutical Industry

Module Details

Module Code:	PHAR S8021
Full Title:	Health and Safety for the (Bio)Pharmaceutical Industry APPROVED
Valid From::	Semester 1 - 2020/21 (September 2020)
Language of Instruction:	English
Duration:	1 Semester
Credits::	5
Module Owner::	• annamarie rogers • Edel Healy
Departments:	Life and Health Sciences
Module Description:	The aim of this module is to provide students with a knowledge of health and safety legislation relevant to the biopharmaceutical industry including the ability to recognize, evaluate and manage the relevant hazards through a range of relevant risk assessment techniques

Module Learning Outcome	
On successful completion of this module the learner will be able to:	
#	**Module Learning Outcome Description**
MLO1	Evaluate the statutory requirements for the management of relevant hazards in the Biopharmaceutical Industry
MLO2	Design appropriate risk assessment methodology and implement safety management systems.
MLO3	Appraise chemical classification, labelling and Packaging requirements and biological agent risks according to current legislation and codes of practice
MLO4	Assess methods of Environmental Monitoring and waste management
MLO5	Evaluate how workplace health hazards can be monitored and controlled

Pre-requisite learning
Module Recommendations *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).*
No recommendations listed

Module Indicative Content
Safety, Health and Welfare at Work Act 2005 and associated regulations Identify the employers and employee's role with regard to health and safety in the manufacturing sector. Know the essential components of a Safety Statement.
Risk Assessment Principles of Risk Assessment; Undertake a risk assessment; Determine control measures, procedures and required documentation e.g. HAZOP ,SWIFT
Chemical Hazards Chemicals Act; Classification, Labelling & Packaging Regulations; Chemical Hazards; Code of Practice (chemical agents); REACH
Biological Hazards Biological Agents Regulations; Biohazards; Methods of prevention, control and disposal of biohazards; Biosafety; Code of practice for health and safety at work (biological agents) Regulations 2013 and 2020
Occupational Hygiene Evaluation of health hazards; Mechanisms of control; Ventilation Control; Respiratory Protection mechanisms.
Environmental Hazards in Manufacturing Waste storage and disposal, emissions, environmental impact of raw materials and packaging. Environmental Management System.
Machine, Gas, Electricity & Fire Safety 2007 Safety, Health and Welfare at Work (General Application) Regulations; Audits and safety checks; Control systems; Fire safety, protection and extinction

Module Assessment

Assessment Breakdown	%
Course Work	30.00%
Project	50.00%
Practical	20.00%

Module Special Regulation

Assessments

Part Time On Campus

Course Work

Assessment Type	Class Test	**% of Total Mark**	30
Marks Out Of	0	**Pass Mark**	0
Timing	End-of-Semester	**Learning Outcome**	1,2,3,4,5
Duration in minutes	0		

Assessment Description
A 2 hour in-class exam

Project

Assessment Type	Project	**% of Total Mark**	50
Marks Out Of	0	**Pass Mark**	0
Timing	n/a	**Learning Outcome**	2,3,4
Duration in minutes	0		

Assessment Description
Complete a chemical/environmental/biological risk assessment

Practical

Assessment Type	Practical/Skills Evaluation	**% of Total Mark**	20
Marks Out Of	0	**Pass Mark**	0
Timing	n/a	**Learning Outcome**	2,3
Duration in minutes	0		

Assessment Description
Students will complete two virtual H&S lab simulations (based on chemical & biological safety) and complete a quiz upon completion.

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

This module has no Full Time On Campus workload.

Workload: Part Time On Campus

Workload Type	*Contact Type*	*Workload Description*	*Frequency*	*Average Weekly Learner Workload*	*Hours*
Lecture	Contact	Lecture	Every Week	2.00	2
Practical	Contact	Chemical Safety & Biosafety Virtual Laboratories	Once per semester	0.20	3
Independent Study	Non Contact	No Description	Every Week	3.00	3
Directed Reading	Non Contact	No Description	Every Week	3.00	3
				Total Weekly Learner Workload	8.20
				Total Weekly Contact Hours	2.20

Module Resources

This module does not have any book resources

This module does not have any article/paper resources

Other Resources

Website, HSA. (2005), Website: Health and Safety Authority 2005, Safety, Health and Welfare at Work Act 2005, Ireland, HSA,
http://www.hsa.ie/eng/Legislation/Acts/S afety_Health_and_Welfare_at_Work/SI_No_1 0_of_2005.pdf

Website, HSA. (2020), Code of practice for the safety, health and welfare at work (biological agents) Regulations 2013 and 2020., Health & Safety Authority, Dublin, Ireland, HSA,
https://www.hsa.ie/eng/news_events_media /news/news_and_articles/code_of_practice _for_the_safety_health_and_welfare_at_wo rk_biological_agents_regulations_2013_an d_2020.html

Website, HSA. (2018), 2018 Code of Practice for the Chemical Agents Regulations, Ireland, HSA,
https://www.hsa.ie/eng/Publications_and_ Forms/Publications/Chemical_and_Hazardou s_Substances/Chemical_Agents_COP_2018.pd f

Website, HSA. (2015), A Guide to Non-Respiratory Personal Protective Equipment (PPE) for use with Chemical Agents in the Workplace, Ireland, Health & Safety Authority, Dublin, Ireland, HSA,
https://www.hsa.ie/eng/Publications_and_ Forms/Publications/Chemical_and_Hazardou s_Substances/A_Guide_to_Non-Respiratory_ Personal_Protective_Equipment_PPE_for_us e_with_Chemical_Agents_in_the_Workplace. html

Website, EPA. Environmental Protection Agency,
https:www.epa.ie