

**AGRI S6012: Chemical and Environmental Risk  
Assessment**

| Module Details           |   |
|--------------------------|---|
| Module Code:             | AGRI S6012  |
| Full Title:              | Chemical and Environmental Risk Assessment <b>APPROVED</b>  |
| Valid From::             | Semester 1 - 2019/20 ( June 2019 )  |
| Language of Instruction: | English   |
| Duration:                | 1 Semester  |
| Credits::                | 5   |
| Module Owner::           | Siobhan Keenan  |
| Departments:             | Unknown   |
| Module Description:      | The aim of this module is to provide the learner with the practical skills and knowledge necessary to manage chemical and environmental hazards in the workplace in a safe, legally compliant and risk-controlled manner. |

| Module Learning Outcome  |  |
|--|--|
| On successful completion of this module the learner will be able to:   |  |
| #  | Module Learning Outcome Description  |
| MLO1   | Identify and discuss the statutory requirements for the management of chemical and environmental hazards in the workplace.                           |
| MLO2   | Outline the chemical and environmental hazards in the workplace and associated health risks.   |
| MLO3   | Interpret chemical Safety Data Sheets (SDSs) and product labelling, in addition to identifying the hazards associated with chemical storage and use. |
| MLO4   | Undertake a chemical and environmental risk assessment, required to maintain a safe place of work.   |
| Pre-requisite learning   |  |
| Module Recommendations   |  |
| <p><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></p> |  |
| No recommendations listed  |  |

| Module Indicative Content   |
|---|
| <b>Chemical and Environmental Hazards</b><br>An introduction to the presence of chemical and environmental hazards in the work place. The effect of such hazards on the body and surrounding environment. Statutory requirements.                       |
| <b>Chemical Hazards in Manufacturing</b><br>Interpreting hazard information, labelling and SDS (Safety Data Sheets). Inventory development and chemical management in the workplace.  |
| <b>Environmental Hazards in Manufacturing</b><br>Waste storage and disposal, emissions, hazardous substance, liquid waste, environmental impact of raw materials and packaging. Assessing environmental factors. Environmental Management System (BMS). |
| <b>Risk Assessment Principles</b><br>Identify the hazards; Evaluate the risk; Record your finding; Review and revise.   |
| <b>Performing a Risk Assessment</b><br>Undertake a risk assessment in relation to chemical and environmental hazards in workplace settings. Determining control measures, procedures and required documentation.  |

| Module Assessment         |        |
|---------------------------|--------|
| Assessment Breakdown      | %      |
| Course Work               | 50.00% |
| Project                   | 50.00% |
| Module Special Regulation |        |
|                           |        |

## Assessments

| Full Time On Campus    |               |                  |    |
|------------------------|---------------|------------------|----|
| Course Work            |               |                  |    |
| Assessment Type        | Class Test    | % of Total Mark  | 50 |
| Marks Out Of           | 0             | Pass Mark        | 0  |
| Timing                 | n/a           | Learning Outcome |    |
| Duration in minutes    | 0             |                  |    |
| Assessment Description | n/a           |                  |    |
| Project                |               |                  |    |
| Assessment Type        | Group Project | % of Total Mark  | 50 |
| Marks Out Of           | 0             | Pass Mark        | 0  |
| Timing                 | n/a           | Learning Outcome |    |
| Duration in minutes    | 0             |                  |    |
| Assessment Description | n/a           |                  |    |
| No Practical           |               |                  |    |
| No Final Examination   |               |                  |    |

| Part Time On Campus  |  |                  |       |
|--|--|------------------|-------|
| Course Work  |  |                  |       |
| Assessment Type  | Continuous Assessment                                | % of Total Mark  | 50    |
| Marks Out Of   | 100  | Pass Mark        | 40    |
| Timing   | n/a  | Learning Outcome | 1,2,3 |
| Duration in minutes  | 0  |                  |       |
| Assessment Description   | Online quizzes.                                      |                  |       |
| Project  |  |                  |       |
| Assessment Type  | Project  | % of Total Mark  | 50    |
| Marks Out Of   | 100  | Pass Mark        | 40    |
| Timing   | Sem 2 End  | Learning Outcome | 2,3,4 |
| Duration in minutes  | 0  |                  |       |
| Assessment Description   | Complete a chemical / environmental risk assessment. |                  |       |
| No Practical   |  |                  |       |
| No Final Examination   |  |                  |       |
| Reassessment Requirement   |  |                  |       |
| A repeat examination<br>Reassessment of this module will consist of a repeat examination. It is possible that there will also be a requirement to be reassessed in a coursework element. |  |                  |       |

## Module Workload

This module has no Full Time On Campus workload.

### Workload: Part 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> |
|----------------------|---------------------|--|--------------------|--|--------------|
| Online Contact       | Contact             | Online lectures, case studies, quizzes, discussion groups, supplementary reading | Every Week         | 2.00                                   | 2            |
| Lecture              | Contact             | Face to face lectures (2 hours twice per semester)                               | Twice per semester | 0.27                                   | 2            |
| Independent Study    | Non Contact         | No Description   | Every Week         | 1.00                                   | 1            |
|                      |                     |  |                    | Total Weekly Learner Workload          | 3.27         |
|                      |                     |  |                    | Total Weekly Contact Hours             | 2.27         |

## Module Resources

### Recommended Book Resources

Calow, P.. (1998), Handbook of environmental risk assessment and management, Blackwell Science, Oxford, [ISBN: 0865427321].  
Simmons, S.. (2013), The Management of Environmental Risks in the Workplace, 3rd. RMS Publishing, [ISBN: 978-190667424].

### Supplementary Book Resources

Hughes P., Ferrett E.. (2005), Introduction to health and safety at work, 2nd ed. Elsevier, Amsterdam, [ISBN: 0750666234].  
Tilleard, A.. (2010), Quick win safety management : answers to your top 100 safety management questions, Oaktree, Cork, [ISBN: 1904887414].  
Waters, B.. (2013), Introduction to Environmental Management, 1st. Routledge, [ISBN: 978-04155344].

*This module does not have any article/paper resources*

### Other Resources

Website, Health and Safety Authority. (2016), A Guide to Risk Assessments and Safety Statements,  
[https://www.hsa.ie/eng/Publications\\_and\\_Forms/Publications/Safety\\_and\\_Health\\_Management/Guide\\_to\\_Risk\\_Assessments\\_and\\_Safety\\_Statements.pdf](https://www.hsa.ie/eng/Publications_and_Forms/Publications/Safety_and_Health_Management/Guide_to_Risk_Assessments_and_Safety_Statements.pdf)  
Website, Environmental Protection Agency,  
<https://www.epa.ie/>  
Website, Health and Safety Authority,  
<https://www.hsa.ie/>  
Website, Business electronic Safety Management And Risk assessment Tool,  
<https://www.besmart.ie/>