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## MODULE DESCRIPTOR

### Module Title

Plant Biology

Reference	AS2106	Version	1
Created	September 2017	SCQF Level	SCQF 8
Approved	August 2018	SCQF Points	15
Amended		ECTS Points	7.5

### Aims of Module

To provide students with the ability to explain the fundamentals of plant biology and appreciate the importance of plants to society.

### Learning Outcomes for Module

On completion of this module, students are expected to be able to:

- 1 Explain plant evolution and describe the major plant groups.
- 2 Discuss the requirements for the survival and growth of plants.
- 3 Describe the processes associated with plant survival, growth and reproduction.
- 4 Discuss the importance of plants and plant products to society.
- 5 Demonstrate effective teamwork and communications skills

### Indicative Module Content

Introduction to the Plant Kingdom: evolution of plants, taxonomic classification, principal characteristics of lower and higher plants. Plant growth requirements: environmental factors, water, light, temperature, gravity, gases, soil minerals, macronutrients, micronutrients, salinity, pH, biotic factors, hormones, photosynthesis. Plant growth: cell division, transpiration. Sexual reproduction, pollination, fertilisation, germination, seeds and fruits. Vegetative growth, asexual reproduction. senescence, abscission. Plants and society: plant breeding, crop production, secondary metabolites, plant biotechnology.

### Module Delivery

This is a lecture based course supplemented with tutorial sessions and virtual lab exercises.

**Indicative Student Workload**

	Full Time	Part Time
Contact Hours	36	N/A
Non-Contact Hours	114	N/A
Placement/Work-Based Learning Experience [Notional] Hours	N/A	N/A
TOTAL	150	N/A
<i>Actual Placement hours for professional, statutory or regulatory body</i>		

**ASSESSMENT PLAN**

If a major/minor model is used and box is ticked, % weightings below are indicative only.

**Component 1**

Type:	Examination	Weighting:	70%	Outcomes Assessed:	1, 2, 3
Description:	The examination consists of a balance of short answer and extended response questions.				

**Component 2**

Type:	Coursework	Weighting:	30%	Outcomes Assessed:	4, 5
Description:	The coursework consists of an oral group presentation with peer assessment				

**MODULE PERFORMANCE DESCRIPTOR****Explanatory Text**

This module is assessed using the two components of assessment as detailed in the Assessment Plan. To pass this module, candidates must achieve a Module Grade D or better.

Module Grade	Minimum Requirements to achieve Module Grade:
<b>A</b>	Final aggregate mark of 70% or greater and a minimum of 35% in C1 and C2
<b>B</b>	Final aggregate mark of between 60-69% and a minimum of 35% in C1 and C2
<b>C</b>	Final aggregate mark of between 50-59% and a minimum of 35% in C1 and C2
<b>D</b>	Final aggregate mark of between 40-49% and a minimum of 35% in C1 and C2
<b>E</b>	MARGINAL FAIL. Final aggregate mark of between 35-39% and a minimum of 35% in C1 and C2
<b>F</b>	FAIL. A mark of less than 35% in either component
<b>NS</b>	Non-submission of work by published deadline or non-attendance for examination

**Module Requirements**

Prerequisites for Module	Successful completion of Stage 1 of the course or equivalent.
Corequisites for module	None.
Precluded Modules	None.

**INDICATIVE BIBLIOGRAPHY**

- 1 EVERT, R.F. AND EICHORN, S.E., *Raven Biology of Plants*. Current Edition. : MacMillan.
- 2 BIDLACK, J.E. AND JANSKY, S.H., *Stern's Introductory Plant Biology*. Current Edition.: McGraw Hill.
- 3 MAUSETH, J.D., *Botany*. Current Edition.: Jones and Bartlett