

**CORPORATE AND ACADEMIC SERVICES**

**MODULE SPECIFICATION**

<b>Part 1: Basic Data</b>					
Module Title	Crop Production				
Module Code	UILXSH-15-1	Level	1	Version	1
Owning Faculty	Hartpury	Field	Animal and Land Science		
Contributes towards	FdSc Agriculture				
UWE Credit Rating	15	ECTS Credit Rating	7.5	Module Type	Standard
Pre-requisites	None		Co-requisites	None	
Excluded Combinations	None		Module Entry requirements	None	
Valid From	01 September 2014		Valid to	01 September 2020	

<b>CAP Approval Date</b>	27 January 2014
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<b>Part 2: Learning and Teaching</b>	
Learning Outcomes	<p>On successful completion of this module students will be able to:</p> <ol style="list-style-type: none"> <li>1 Summarise processes involved in the development of crop varieties (A).</li> <li>2 Review the biotic and abiotic conditions required for successful crop production (A).</li> <li>3 Compare a range of alternative systems for crop production and protection (A).</li> <li>4 Review factors influencing the profitability of crop production systems (B).</li> <li>5 Derive economic and practical fertiliser recommendations from soil analysis data (B).</li> <li>6 Collect crop data from a standing crop in the field, carry out simple statistical analysis, and present in an informative manner (B).</li> </ol>
Syllabus Outline	<ol style="list-style-type: none"> <li>1 The production of modern crop varieties by means of traditional plant breeding and by genetic engineering; the development of herbicide resistant and pest resistant crops; the contribution of varietal characteristics to crop performance.</li> <li>2 Quality requirements for main UK and European crops; milling/feed wheat, malting/feed barley, oil seed rape, sugar beet, potatoes, peas, beans, forage maize, and linseed.</li> <li>3 Factors within and without the farmer's control; choice of variety; seed generation and treatment; soil type; seedbed cultivation; seedbed fertilisers; germination, vigour and crop establishment; pests and diseases.</li> <li>4 Effects of crop production on air, soil and water; codes of good agricultural practice; hedgerow and field margin management.</li> <li>5 Gross margin analysis of different crops and systems.</li> </ol>

Contact Hours	<p>Indicative delivery modes:</p> <table border="0"> <tr> <td>Lectures, guided learning, seminars etc</td> <td style="text-align: right;">33</td> </tr> <tr> <td>Self directed study</td> <td style="text-align: right;">3</td> </tr> <tr> <td>Independent learning including work placement</td> <td style="text-align: right;">114</td> </tr> <tr> <td><b>TOTAL HOURS</b></td> <td style="text-align: right;"><b>150</b></td> </tr> </table>	Lectures, guided learning, seminars etc	33	Self directed study	3	Independent learning including work placement	114	<b>TOTAL HOURS</b>	<b>150</b>												
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Teaching and Learning Methods	<p>A variety of learning strategies will be used including lectures, seminars and on-farm workshops and self-directed learning. Students will also be expected to engage in independent learning throughout the module and time to complete assessment work.</p> <p><b>Scheduled learning</b> May include lectures, seminars, tutorials, project supervision, demonstration, practical classes and workshops; fieldwork; external visits; work based learning; supervised time in studio/workshop.</p> <p><b>Independent learning</b> May include hours engaged with essential reading, case study preparation, assignment preparation and completion etc.</p> <p><b>Virtual learning environment (VLE)</b> This specification is supported by a VLE where students will be able to find all necessary module information. Direct links to information sources will also be provided from within the VLE.</p>																				
Key Information Sets Information	<p>Key information sets (KIS) are produced at programme level for all programmes that this module contributes to, which is a requirement set by HESA/HEFCE. KIS are comparable sets of standardised information about undergraduate courses allowing prospective students to compare and contrast between programmes they are interested in applying for.</p> <p><b>Key information set – module data</b></p> <table border="0" style="width: 100%;"> <tr> <td style="width: 70%;">Number of credits for this module</td> <td style="border: 1px solid black; text-align: center; width: 30%;">15</td> </tr> </table> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="width: 15%;">Hours to be allocated</th> <th style="width: 25%;">Scheduled learning and teaching study hours</th> <th style="width: 20%;">Independent study hours</th> <th style="width: 20%;">Placement study hours</th> <th style="width: 20%;">Allocated Hours</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">150</td> <td style="text-align: center;">36</td> <td style="text-align: center;">114</td> <td style="text-align: center;">0</td> <td style="text-align: center;">150</td> </tr> </tbody> </table> <p>The table below indicates as a percentage the total assessment of the module which constitutes:</p> <ol style="list-style-type: none"> <li>1 <i>Written exam:</i> Unseen written exam, open book written exam, in-class test.</li> <li>2 <i>Coursework:</i> Written assignment or essay, report, dissertation, portfolio, project.</li> <li>3 <i>Practical exam:</i> Oral assessment and/or presentation, practical skills assessment, practical exam.</li> </ol> <p>Please note that this is the total of various types of assessment and will not necessarily reflect the component and module weightings in the assessment section of this module description:</p> <p>Total assessment of the module:</p> <table border="0" style="width: 100%; margin-top: 10px;"> <tr> <td style="width: 60%;">Written exam assessment percentage</td> <td style="border: 1px solid black; text-align: center; width: 40%;">40%</td> </tr> <tr> <td>Coursework assessment percentage</td> <td style="border: 1px solid black; text-align: center;">60%</td> </tr> <tr> <td>Practical exam assessment percentage</td> <td style="border: 1px solid black; text-align: center;">0%</td> </tr> <tr> <td></td> <td style="text-align: center;">100%</td> </tr> </table>	Number of credits for this module	15	Hours to be allocated	Scheduled learning and teaching study hours	Independent study hours	Placement study hours	Allocated Hours	150	36	114	0	150	Written exam assessment percentage	40%	Coursework assessment percentage	60%	Practical exam assessment percentage	0%		100%
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Reading Strategy	<p><b>Essential readings</b> Any essential reading will be indicated clearly, along with the method for accessing it, e.g. students may be required to purchase a set text, be given a print study pack or be referred to texts that are available electronically or in the Library. Module guides will also reflect the range of reading to be carried out.</p> <p><b>Further readings</b> Further reading will be required to supplement the set text and other printed readings. Students are expected to identify all other reading relevant to their chosen topic for themselves. They will be required to read widely using the library search, a variety of bibliographic and full text databases, and Internet resources. Many resources can be accessed remotely. The purpose of this further reading is to ensure students are familiar with current research, classic works and material specific to their interests from the academic literature.</p> <p><b>Access and skills</b> Formal opportunities for students to develop their library and information skills are provided within the induction period and study skills sessions. Additional support is available through online resources. This includes interactive tutorials on finding books and journals, evaluation information and referencing. Sign up workshops are also offered.</p>
Indicative Reading List	<p>The following list is offered to provide validation panels/accrediting bodies with an indication of the type and level of information students may be expected to consult. As such, its currency may wane during the life span of the module specification. However, as indicated above, CURRENT advice on readings will be available via other more frequently updated mechanisms, including the module guide.</p> <ul style="list-style-type: none"> <li>• Brown, J H (Current edition) <i>An introduction to plant breeding</i>. Oxford: Blackwell.</li> <li>• Culpin C (Current edition) <i>Farm machinery</i>. Oxford: Blackwell.</li> <li>• DEFRA (2010) <i>Fertiliser recommendations for agricultural and horticultural crops</i> (RB209). London: The Stationery Office.</li> <li>• Finch, H J S, Lockhart, J A R , Samuel, A M and Lane, G P F (Current edition) <i>Lockhart and Wiseman's crop husbandry including grassland</i>. Cambridge: Woodhead.</li> <li>• Kang, M S (Ed) (Current edition) <i>Crop improvement: challenges in the 21st century</i>. New York: Food Products Press.</li> <li>• Lampkin, N (Current edition) <i>Organic Farm Management Handbook</i>. Organic Research Group.</li> <li>• National Institute of Agricultural Botany (Current Edition) <i>Pocket guide to varieties of cereals, oilseeds and pulses</i>. NIAB</li> <li>• Nix, J (Current edition) <i>Farm management handbook</i>, London: Imperial College</li> <li>• Soffe, R J (Ed) (Current edition) <i>Agricultural notebook</i>. Oxford: Blackwell Science.</li> <li>• Soil Association (Current edition) <i>The biodiversity benefits of organic farming</i>. Bristol: Soil Association.</li> <li>• Wilkinson, J M, Newman, G and Allen, D M (Current edition) <i>Maize – producing and feeding maize silage</i>. Lincoln: Chalcombe Publications.</li> </ul> <p>Websites and databases:</p> <ul style="list-style-type: none"> <li>• Agriculture Research: <a href="http://www.rothamsted.ac.uk">www.rothamsted.ac.uk</a></li> <li>• Farmers Weekly: <a href="http://www.farmersweekly.co.uk">www.farmersweekly.co.uk</a></li> <li>• Genetic modification: <a href="http://www.actionbioscience.org">www.actionbioscience.org</a></li> <li>• HGCA: <a href="http://www.hgca.com">www.hgca.com</a></li> <li>• Institute of Arable Crops Research: <a href="http://www.chm.org.uk">www.chm.org.uk</a></li> <li>• NIAB: <a href="http://www.niab.com">www.niab.com</a></li> </ul> <p>The above sources give an indication of the area of study involved. Although students may be directed to some specific titles, they will also be encouraged to identify other relevant material for themselves.</p>

### Part 3: Assessment

<b>Assessment Strategy</b>	<p>The written examination has been chosen so to facilitate broad assessment of the knowledge and understanding; and the intellectual skills gained throughout the module in a time-limited and controlled setting.</p> <p>The written report assignment is chosen to facilitate in depth utilisation of skills and understanding gained from farm visits and seminars; and relating this to material learnt in lectures and in additional study via analysis, evaluation and discussion.</p> <p>Feedback will be provided throughout the module via tutorial support; class and on farm discussions and short exercises in addition to that on assignment submissions and examination scripts.</p> <p>In line with the College's commitment to facilitating equal opportunities, a student may apply for alternative means of assessment if appropriate. Each application will be considered on an individual basis taking into account leaning and assessment needs. For further information regarding this please refer to VLE.</p>		
Identify final assessment component and element	Written examination (1 hour)		
% weighting between components A and B (Standard modules only)	<b>A:</b>	<b>B:</b>	
	40%	60%	
<b>First Sit</b>			
<b>Component A</b> (controlled conditions) <b>Description of each element</b>		<b>Element weighting</b>	
1	Written examination (1 hour)	100%	
<b>Component B</b> <b>Description of each element</b>		<b>Element weighting</b>	
1	Written report (1,500 words)	100%	
<b>Resit (further attendance at taught classes is not required)</b>			
<b>Component A</b> (controlled conditions) <b>Description of each element</b>		<b>Element weighting</b>	
1	Written examination (1 hour)	100%	
<b>Component B</b> <b>Description of each element</b>		<b>Element weighting</b>	
1	Written assignment (1,500 words)	100%	
If a student is permitted an <b>EXCEPTIONAL RETAKE</b> of the module the assessment will be that indicated by the Module Description at the time that retake commences.			