HARPER ADAMS UNIVERSITY
Module Descriptor

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<td>1</td>
<td>Module Title:</td>
<td>BASIS Foundation Award – Grassland and Forage Crops</td>
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<td>2</td>
<td>Academic Department:</td>
<td>Crop and Environment Sciences</td>
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<td>3</td>
<td>Module Author:</td>
<td>Dr Andy Brooks</td>
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<td>4</td>
<td>Module Number:</td>
<td>C4035</td>
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<td>5</td>
<td>Credit Value:</td>
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<td>6</td>
<td>Level:</td>
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<td>7</td>
<td>Pre-requisite Achievement:</td>
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<td>8</td>
<td>Co-requisites:</td>
<td>None</td>
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<td>9</td>
<td>Excluded Combinations:</td>
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<td>10</td>
<td>Module Approval Date:</td>
<td>28th May 2015</td>
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<td>11</td>
<td>Start and Expiry Date of Module:</td>
<td>May 2015 – August 2020</td>
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<td>12</td>
<td>Courses for which Module Validated:</td>
<td>Professional Short Course Suite (not counted for the GDAEM)</td>
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RATIONALE AND CONTEXT

The course is an introduction to agronomy, integrated crop protection and crop nutrition for grassland and forage crops.

For candidates with a limited crop experience and knowledge it serves as a preliminary course for the BASIS Certificate in Crop Protection (Grassland & Forage Crops) Course. For those who have a role which will not involve giving agronomy and crop protection advice, it is a stand-alone course providing them with a level of understanding and knowledge appropriate for their work. This will include some farm staff, quality assurance officers, machinery manufacturers and retail personnel.

The qualification, awarded to those successful in the examination, would be of particular value to those for whom this may be an end point in agronomy training. It would also serve to encourage those considering progression to other courses such as the BASIS Certificate in Crop Protection (Grassland and Forage Crops) and FACTS.

This module addresses the university mission in promoting widening participation and the recognition of work related learning through the award of academic credit. It is designed to provide the underpinning knowledge and understanding required by those involved in the agronomy industry.

INTENDED LEARNING OUTCOMES

1. Explain the cropping life cycles, production systems and end market requirements for UK grassland and forage crops.
2. Identify important weeds, pests and diseases of grassland and forage crops, and describe their biology and the principles of their integrated control.
3. Explain the use of plant protection products and fertilisers, the machinery used in their application, and current environmental and Health and Safety Legislation associated with them.

4. Identify the main UK soil types, structure and texture and their impact on crop nutrition and production.

INDICATIVE CONTENT

Crop Production: Crops and their life-cycles; Crop yield and quality; Crop establishment; management and harvesting.

Weeds: Weed identification of grassland and forage crops; Weed biology; Weed control and integrated weed control.

Pests: Pest identification of grassland and forage crops; Beneficial species; Pest biology; Pest control and integrated pest control.

Diseases: Disease identification of grassland and forage crops; Organisms which cause plant diseases and their biology; Disease control and integrated disease control.

Soil and Crop Nutrition: Soil type identification; Importance of soil types and of soil structure in crop production; Crop nutrition decisions; The role of liming; Essential plant elements and nutrients.

Plant Protection and Fertiliser Products: Plant protection and fertiliser products; Mode of action of a plant protection product; Chemical form of a plant nutrient; Pesticide resistance and anti-resistance strategies; Formulation of plant protection and fertiliser products; Adjuvants.

Protecting People, Animals and the Environment: The framework of pesticide legislation applicable in the UK; Legislation relevant to fertiliser use; Codes of Practice; Plant protection product labels; Best practice in the storage of plant protection products and fertilisers on farms; Consumer and bystander protection; Accidental poisoning of wildlife avoidance and addressing illegal poisoning; COSHH assessments.

Application of Plant Protection Products and Fertilisers: Operation and use of fertiliser and pesticide application machinery; Spray quality and water volume; Types of fertiliser application machinery; Pesticide and fertiliser drift; Best practice for disposal of pesticide and fertiliser wastes.

LEARNING AND TEACHING STRATEGY

Nature of student support

Participatory training techniques are to be used throughout, such as workshops, seminars and field trips. In addition to the formal course contact, candidates are required to study the essential reading and familiarise themselves with UK crops and associated pests, weeds and diseases by crop walking.

Support through Virtual Learning Environment

None.

Pattern of study including links to other module delivery
Students should complete pre-course reading in advance of the taught elements of the course in order to familiarise themselves with the key aspects of the syllabus. Students are also expected to draw upon their professional field experience in advance of the course and reflect on that experience both before and during the various blocks of contact time. It is important that the student spends time actively reflecting on the content of the course in order to contextualise its relevance to the workplace.

The course duration is normally 6 days which are spread over the calendar year so that farm crops can be seen at different stages.

**Variations for different course groups**

None.

**ASSESSMENT STRATEGY**

**Assessment format**

The examination is a time constrained written paper consisting of 40 multiple choice questions and 3 structured short-answer questions. The results are marked by BASIS. Pass mark is 70%.

Marks from each component of assessment are calculated to provide a single mark, recorded as either **pass** or **fail** and candidates will be required to pass all elements in order to successfully pass the module.

**Outcomes assessed**

All learning outcomes will be assessed by means of the exam.

**Timing of assessments, including final assessment element**

The assessments will follow the final period of short course delivery.

**Variations for different course groups**

N/A.

**Essential Reading** (correct at time of approval but subject to regular updates through annual reading lists)


**Recommended Reading** (correct at time of approval but subject to regular updates through annual reading lists)
Alliston JC and Paul AA 2009 *Grassland and clover establishment management and utilisation*. NUFF.


Recommended Websites:

Crop Protection Association [www.cropprotection.org.uk/](http://www.cropprotection.org.uk/)
Linking the Environment and Farming (LEAF) [www.leafuk.org](http://www.leafuk.org)

HEAD OF DEPARTMENT APPROVAL:

Dr Andy Wilcox

Date: 28th May 2015