

**-SQA-SCOTTISH QUALIFICATIONS AUTHORITY**

**Hanover House  
24 Douglas Street  
GLASGOW G2 7NG**

**NATIONAL CERTIFICATE MODULE DESCRIPTOR**

**-Module Number- 0078162 -Session-1987-88**

**-Superclass- SD**

**-Title- GRASSLAND PRODUCTION**

**-DESCRIPTION-**

Type and Purpose A specialist module concerned with the factors affecting the establishment and utilisation of a ley.

Preferred Entry Level 0078005 Green Plant  
0068031 Plant Production from Seed  
0068121 Crop Nutrition

Learning Outcomes

The student should:

1. know the significance of grassland in British agriculture;
2. identify grass and clover species at all stages of growth;
3. select a seed mixture;
4. know how to establish a grass/clover crop;
5. plan the management of a sward.

Content/Context

Corresponding to Learning Outcomes 1-5:

1. Rough grazing; permanent grass; rotational grass. Distribution of grassland types within the United Kingdom. Economic importance.
2. Identification at seed, vegetative and flowering stage commonly sown grasses and clovers e.g. Italian Ryegrass, Perennial Ryegrass, Timothy, Cocksfoot, White Clover, Red Clover.

Identification at vegetative and flowering stage non sown species e.g. Annual Meadow Grass, Couch

Grass, Tall Fescue, Meadow Fescue, Yorkshire  
Foy.

3. Seed mixtures for grazing/conservation in short, medium and long term leys; permanent pasture.

4. Seed-beds and seed-bed preparation for direct sowing, under sowing and direct re-seeding.

Field procedures and selection of appropriate machinery to include examples of a broadcasting and a drilling machine.

Place in cropping sequence.

Timing of operations.

Nutrient needs.

5. Weed control in young sward. Early management of sward.

Seasonal pattern of growth.

Nutrient needs for crop establishment; fertiliser usage related to extending grazing season; species balance and stocking. Calculation of seasonal requirements. Grazing systems to include:

zero grazing; set stocking and continuous grazing; strip grazing; paddocks; forward creep grazing.

Frequency and severity of defoliation.

Stocking rates.

Fencing; water; access; poaching; topping.

Parasite control - fluke, husk, stomach worms.

Calculation of output per animal and output per unit area.

Integration of grazing and conservation.

#### Suggested Learning and Teaching Approaches

It is desirable that the following modules be taught concurrently with this module if they have not been taken previously.

68051 Fertilisers : Quantity and Application

78033 Plant Protection 1

Resource based learning will provide a major component of the teaching approach for this module. Every opportunity should be taken to include field and laboratory exercises in the programme.

Relating to the Learning Outcomes:

2. Use of 2/3 stage key. Collection of seed samples; flowering heads.

3&4 Collection of commercial leaflets and recommended lists.

5. Examination of seed beds and young swards to decide treatments and setting of machinery.

As much of these outcomes as possible should be taught in the field environment. If seasonal limitations preclude this then maximum use should be made of slides, files and video tapes.

Exercises should be worked on stocking rates based on standard carrying capacities.

Assessment  
Procedures

Acceptable performance in the module will be satisfactory achievement of the performance criteria specified for each Learning Outcomes

Where cutting scores are stated these are intended to be for guidance. The precise cutting score for a test will depend on the difficulty of the test and will have to be decided by the Tutor aided by the Assessor.

LO Learning Outcome

IA Instrument of Assessment

PC Performance Criteria

LO1 IA Written test consisting of 5 short answer questions.

PC The student explains the significance of grassland in British agriculture.

Cutting score 80%.

LO2 IA Identification test.

PC The student identifies with use of a key, 5 specimens of sown grasses and clovers and 5 specimens of non sown species at different stages of growth. If live specimens are not available pictures of specimens may be used.

Cutting score 80%.

LO3 IA Written open book exercise - the student is required to select a seed mixture for a given situation.

PC The student:

(a) correctly analyses the requirement;

- (b) effectively uses literature;
- (c) chooses an appropriate mixture;
- (d) takes account of economic considerations.

LO4 IA Written test consisting of 5 short answer questions.

PC The student explains how to establish a grass/clover crop.

Cutting score 80%.

LO5 IA Written open book exercise - the student is required to plan the management of a sward.

PC The student:

- (a) correctly analyses use and identifies objectives;
- (b) proposes an appropriate method for fertiliser application and weed control;
- (c) efficiently utilises sward;
- (d) makes profitable proposals.