SAMPLE COURSE OUTLINE

ANIMAL PRODUCTION SYSTEMS
GENERAL YEAR 11
Sample course outline
Animal Production Systems – General Year 11
Unit 1 and Unit 2

Semester 1 – Unit 1

<table>
<thead>
<tr>
<th>Week</th>
<th>Key teaching points</th>
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| 1–3  | Structure of the syllabus  
• course outline  
• assessment outline  
Systems ecology  
• structure of natural, urban and agricultural ecosystems  
• natural resources used in agriculture, including soils, water and air  
• water cycles in landscapes |
| 4–6  | Animal structure and function  
• life cycles and stages of growth and development  
• basic structure and function of reproductive systems in selected livestock  
• basic structure and function of digestive systems in ruminants and non-ruminants |
| 7–9  | Animal nutrition  
• nutritional requirements, including proteins, carbohydrates, minerals and vitamins  
• feed requirements for intensive and extensive systems  
• quality and quantity of water supply |
| 10–13| Animal health  
• signs of good and ill health (symptoms) and their causes  
• the five freedoms of animal welfare  
• identification of selected pests and diseases and their impact  
• interpretation of information provided on labels for safe and effective use of registered products  
• categories of pests and diseases, including microbial, metabolic, metazoal and hereditary  
• risks of zoonoses  
• interpretation of chemical labels to determine which product to select  
• application of codes of practice concerning chemical use |
| 14–15| Breeding and improvement  
• natural selection and animal adaptation  
• major breeds for animal production  
• selection of animal types for specific purposes, including meat, milk, fibre |
## Semester 2 – Unit 2

<table>
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<tr>
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| 1–2  | Breeding and improvement  
|      | • breeds and characteristics  
|      | • breeds and their origins, and development into current types |
| 3–5  | Investigating animal production  
|      | • conduct an investigation, considering aspects of experimental design  
|      | • interpret data, including calculating means  
|      | • present data using appropriate methods  
|      | • draw conclusions based on experimental data |
| 6–8  | Economics, finance and markets  
|      | • farming as a business  
|      | • identify resources used in production, including land, labour, capital  
|      | • recording production costs and incomes  
|      | • identification of inputs and outputs  
|      | • farming systems and enterprises  
|      | • available markets  
|      | • calculation of costs, returns and profits |
| 9–11 | Sustainable production  
|      | • efficient use of resources without compromising the environment  
|      | • renewable and non-renewable resources  
|      | • identification of market requirements to be met for selected products  
|      | • the role of quarantine in preventing pests, diseases and weeds  
|      | • prevention of the spread of pests, diseases and weeds to natural ecosystems |
| 12–14| Produce for purpose  
|      | • identify types and features of animal enterprises  
|      | • select equipment and resources when working with animals  
|      | • comply with occupational safety and health requirements (OSH)  
|      | • monitor the physical environment, including the weather  
|      | • develop a calendar of operations for a selected animal enterprise  
|      | • identify quality criteria for selected animal products  
|      | • monitor growth and development of animals  
|      | • monitor the impact of the weather on animal enterprises  
|      | • perform routine care of animals  
|      | • select and use equipment for a given enterprise |
| 15   | Test week – End of Year test |