

Course Title	Animal Husbandry			
Course Code	Vet-105			
Course Type	Required			
Level	Undergraduate			
Year / Semester	Year 1/ Semester 1 (Fall)			
Teacher's Name	Course Lead: Dr Daphne Mavrides			
ECTS	6	Lectures / week	3	Practical / week 1
Course Purpose and Objectives	<p>The main objectives of the course are:</p> <ul style="list-style-type: none"> ● Introducing the students to basic knowledge and skills in the husbandry and handling of dogs, cats, horses, sheep, goats, cattle, pigs, poultry, fish and exotics. ● Teaching the students the various reasons why we keep animals and the use or purpose of these animal species. ● Exposing the students to the basics of keeping and handling of various animal species while taking into consideration normal animal behaviour, welfare, nutrition and ethics. 			
Learning Outcomes	<p>The following list provides the learning objectives (LOBs) that will be covered in the lectures:</p> <p>Week 1 and 2</p> <p>LOBs covered during these weeks:</p> <ol style="list-style-type: none"> 1. Introduction to husbandry and animal welfare. 2. Understand what is required for healthy dogs and cats. 3. Understand the dog and cat industry. 4. Name the various dog breeds and their characteristics. 5. Name the various cat breeds and their characteristics. 6. Outline the vital signs in dogs and cats. 7. Describe routine procedures in dogs and cats. 8. Explain the reproductive cycles in dogs and cats. 9. Explain pregnancy in dogs and cats and its management. 10. Describe neutering in dogs and cats. 11. Recognise ways for control of diseases (vaccination, parasite control). 			

12. Discuss feeding of dogs and cats.
13. Discuss socialisation and habituation in puppies.
14. Outline methods of identification in cats and dogs.
15. Compare the various housing options for dogs and cats.
16. Describe how to body condition score dogs and cats
17. Describe handling and methods of restraint in dogs and cats.
18. Explain how to perform a basic clinical examination in dogs and cats.
19. Outline the sites of injection and blood sampling sites in dogs and cats.
20. Describe dentition in cats and dogs.

Practical sessions (3 hours): Dog and cat husbandry (Group A and B)

Tutorial session (1.5 hours): Problem solving tutorial 1 – cats and dogs

Week 3

LOBs covered during this week:

21. Describe the equine industry.
22. Outline methods of identification in horses.
23. Compare the different characteristics of the different horse breeds.
24. Describe the various coat colours and patterns.
25. Describe how to body condition score a horse.
26. Analyse the feeding requirements and feeding techniques available for equine husbandry.
27. Compare the different housing establishments for horses and the management of each.
28. Outline the different types of bedding and their suitability.
29. Recognise ways for control of diseases (vaccination and parasite control).
30. Explain equine reproduction, pregnancy and foaling.
31. Name first aid procedures in equine medicine.
32. Explain how to determine a horse's age is by its teeth.
33. Outline the different procedures used for the handling of horses.

Practical session (3 hours): Equine husbandry

Week 4

LOBs covered during this week:

34. Describe the dairy cattle industry
35. Select appropriate dairy breeds for different farming situations
36. Explain the farm management of the lactation cycle in dairy cattle
37. Describe the beef cattle industry
38. Explain the differences and advantages of pure breeding and cross breeding
39. Explain the significance of animal breeding programs for milk production
40. Identify breeds suitable for beef production
41. Describe the calving procedure and possible problems
42. Explain what is required for calf management, routine procedures and calf housing
43. Discuss reproduction in the heifer
44. Discuss the management of heifers
45. Compare the advantages and disadvantages of natural mating vs artificial insemination
46. Describe and explain the various key performance indicators
47. Manage general husbandry operations for the dairy cow
48. Describe the feeding requirements and techniques in dairy cattle
49. Explain reproduction post-calving in the cow
50. Manage the wellbeing of a dairy cow, including consideration of her health to optimise quality and quantity of production
51. Explain the management of the dry period
52. Describe and explain factors that can affect calving percentage and calf weaning

Practical session (3 hours): Cattle husbandry

Tutorial session (1.5 hours): Problem solving tutorial 2 – equine

Week 5

LOBs covered during this week:

53. Explain the significance of animal breeding programs for beef production.
54. Describe the different beef systems (intensive, semi-intensive, extensive).
55. Compare the different veal production systems.
56. Analyse beef carcass grading and conformation.
57. Compare the different housing systems for dairy cattle.
58. Compare the different milking parlours in dairy cattle.

59. Describe how to body condition score cattle.
60. Explain the milking process in dairy cattle.
61. Describe the management of mastitis and lameness.
62. Discuss the significance of goats, the characteristics that differentiate them from other domesticated animals and the scope and nature of goat industries.
63. Select appropriate goat breeds for specified purposes.
64. Describe how goats are housed.
65. Determine and manage reproduction in goats.
66. Discuss feeding in goats.
67. Describe common health issues that can affect goats; their prevention and treatment.
68. Determine the facilities and housing needed for the management of goats.
69. Explain the commercial farming of goats for milk, fibre and meat.
70. Describe the routine procedures required for the management of goats such as vaccination and worming.

Practical session (3 hours): Milking practical (cattle, sheep and goats)

Week 6

LOBs covered during this week:

71. Describe the sheep industry.
72. Compare the different characteristics of sheep breeds in terms of appearance, hardiness and commercial potential.
73. Explain the techniques used in sheep commercial breeding.
74. Describe how to body condition score sheep.
75. Explain the techniques used in the management of a commercial flock of sheep throughout the sheep year.
76. Describe pregnancy in sheep, preparation for lambing, the lambing process and the possible problems with the new-born lamb.
77. Compare the different feeding techniques.
78. Compare the differences in food required by different types of sheep including rams, breeding ewes at different stages of pregnancy and sheep being fattened for meat.
79. Describe factors affecting lamb mortality.
80. Describe lamb care and management of the growing lamb (castration, tail docking).

81. Distinguish between the different categories of sheep health problems including lameness and parasites as well as routine health management.

82. Describe the culling and replacement policy

83. Explain how to determine a sheep's age by its teeth.

Practical session (3 hours): Sheep husbandry

Tutorial session (1.5 hours): Problem solving tutorial 3 – sheep, goats and cattle

Week 7

LOBs covered during this week:

84. Describe the pig industry.

85. Analyse the pig production cycle.

86. Analyse pig performance and factors affecting profitability.

87. Select appropriate breeds of pigs for different purposes.

88. Discuss the advantages of cross breeding and hybrid vigour.

89. Describe pig reproduction and service management.

90. Explain the techniques used to physically handle pigs.

91. List the facilities and housing needed for pig farming.

92. Explain the different husbandry operations carried out during each of the different stages of breeding.

93. Describe the management of the sow, litter and growing pigs.

94. List the routine husbandry tasks performed in the sow and piglets.

95. Explain the procedures in managing the health condition and nutritional feeding of pigs.

96. Describe piglet management and how to reduce piglet mortality and loss.

Practical session (3 hours): Pig husbandry

Week 8

LOBs covered during this week:

97. Select appropriate poultry breeds for use in different production systems.

98. Describe the broiler meat and egg production industry.

99. Explain the management of poultry as layers.

100. Explain the procedures for the management of poultry as broilers.

101. Explain the advantages of cross breeding poultry.
102. Explain reproduction in poultry.
103. Compare extensive (free range), semi-intensive, intensive and organic production systems.
104. Explain the management of brooding poultry.
105. Describe the different housing systems and requirements for egg layers and broilers
106. Describe commercially significant diseases in poultry.
107. Describe turkey production and husbandry.
108. Describe the goose and duck production industry.
109. List the dietary sources of different nutrients for poultry.
110. Describe fatty liver production.

Practical session (3 hours): Poultry husbandry (Group A)

Tutorial session (1.5 hours): Problem solving tutorial 4 – pigs and poultry

Week 9

LOBs covered during this week:

111. Describe the different types of birds to keep for different purposes.
112. Outline the feeding requirements of a range of different captive birds.
113. Describe management techniques for the health of different birds.
114. Describe the behavioural traits of captive birds and how to provide enrichment.
115. Describe how to appropriately handle captive birds.
116. Explain how to choose appropriate housing for a range of different types of captive birds.
117. Discuss the scope and nature of aquaria, ponds, lakes and farm fisheries and their management.
118. Identify the various uses of aquaria: home, hobby or commercial applications, tourism, conservation or any other purpose.
119. Describe the water ecosystem.
120. Explain water quality and management.
121. Explain the establishment of a freshwater aquarium and pond.
122. Analyse the maintenance of an aquarium.
123. Describe the various nutritional requirements of fish.

	<p>124. Outline common diseases in fish and their prevention.</p> <p>125. Describe the stress response in fish.</p> <p>126. Learn about the different types of fish to keep - freshwater or salt.</p> <p>Practical session (3 hours): Poultry husbandry (Group B)</p> <p>Week 10</p> <p>LOBs covered during this week:</p> <p>127. Discuss the environmental/caging needs of reptiles.</p> <p>128. Discuss the feeding requirements of reptiles.</p> <p>129. Describe handling techniques in reptiles.</p> <p>130. Describe gender determination in reptiles.</p> <p>131. Explain the handling, caging, feeding, sex determination and other husbandry aspects of the following species: rabbits, ferrets, and rodents (guinea pigs, chinchillas, hamsters, rats, mice and gerbils).</p> <p>132. Discuss the different colours and breeds of rabbits, guinea pigs and hamsters.</p> <p>133. Describe the different colour patterns and variations of ferrets, mice and rats.</p> <p>Practical session (3 hours): Exotics husbandry</p> <p>Tutorial session (1.5 hours): Problem solving tutorial 5 – avian, fish, reptiles and small mammals</p>		
Prerequisites	None	Required	None
Course Content	<ul style="list-style-type: none"> • Husbandry and animal welfare • Healthy dogs and cats • Reproduction in dogs and cats • Puppies and kittens • Control of disease in dogs and cats • Feeding dogs and cats • Equine management (handling, first aid, preventative medicine, reproduction, feeding and stable management) • Sheep production and husbandry • Goat husbandry • The cattle industry (structure, production and management) • The beef industry (structure, production and management) • Pig Husbandry • The poultry industry • Avian husbandry • Fish husbandry • Reptile husbandry 		

	<ul style="list-style-type: none"> • Basic husbandry for small mammals (rodents, rabbits, ferrets) • Handling skills for core species (horse, cattle, sheep, cats, dogs, poultry and pigs) and other species (rats, mice, hamsters, gerbils, rabbits and guinea pigs)
Teaching Methodology	Combination of lectures, tutorials and practical training of animal handling
Bibliography	<ol style="list-style-type: none"> 1. Management and welfare of farm animals. The UFAW farm handbook. John Webster (Recommended) 2. Animal Welfare. M.C. Appleby and B.O. Hughes
Assessment	Participation 10%, course assignment 30% and final exam 60%
Language	English