

Malta College of Arts, Science & Technology

MQF Level 3

AG3-01-19

Diploma in Animal Care

**Course Specification** 

## **Course Description**

This course offers an introduction to working with and handling farm animals and pets, and the related hands-on experience required. It provides the practical skills and background knowledge required to form a solid foundation in animal care.

The student will have the opportunity to acquire knowledge on various housing designs that can be used for farm and pet animals as well as accommodation, study feeding procedures and how to identify and solve animal health problems.

A student who opts for this programme will be expected to attend scheduled husbandry duties which form part of this course. This practical experience, coupled with motivation and responsibility, will back up the theoretical knowledge gained at the Centre.

### **Programme Learning Outcomes**

At the end of the programme the students are able to;

- 1. Recognise and describe the most common domesticated animals and pets.
- 2. Perform simple techniques in animal grooming and care of pets.
- 3. Observe and recognise well-known animal disorders and health problems.
- 4. Use standard tools and accessories in animal care in line with safety procedures.

### **Entry Requirements**

- MCAST Foundation Certificate; or
- 2 SEC/O-Level/SSC&P (level3) passes. Preferred L Biology and English Language
- A full "Secondary School Certificate and Profile" (SSC&P) at Level 2 will be accepted in lieu of one (1) O-Level pass

# **Current Approved Programme Structure**

| Unit Title                           | ECVET |
|--------------------------------------|-------|
| Animal Science                       | 6     |
| Principles of Pet Grooming           | 6     |
| Principles of Animal Nursing         | 6     |
| Basics of Animal Care Technology     | 3     |
| General Animal Husbandry             | 6     |
| Breeding of Rabbits                  | 6     |
| Apiculture                           | 3     |
| Mathematics                          | 4     |
| English                              | 4     |
| Malti                                | 4     |
| Information Technology               | 4     |
| Individual and Social Responsibility | 4     |
| Science and Technology               | 4     |
| Total ECVET                          | 60    |

Unit: Animal Science

Unit level (MQF): 3

Credits : 6

#### **Unit description**

This unit will provide learners with knowledge on animal science to enable them to understand various concepts of animal biology, genetics, breeding principles and nutrition.

Learners will enhance their knowledge about animal taxonomy and divisions of the kingdom of animals, in Maltese, English and Latin.

In relation to the local context, this unit will concentrate on the most important animal species for Maltese agribusiness sector. Learners will be introduced to the anatomy, morphology, physiology and histology of different animals. Learners will also become familiar with the basic principles of genetics, reproduction of animals, reproductive organs and the animal digestive system. In this unit, learners will also understand the basic animal requirements in relation to climate factors.

Familiarisation with the above principles is essential to gain the required skills and competencies in animal care.

### **Learning Outcomes**

- 1. Explain the functions of the main animal organs and their role in the animals' physiological processes.
- 2. Understand the basic principles of genetics and inheritance.
- 3. Describe the reproductive cycle of birds and mammals which are important for local Agribusiness.
- 4. Explain a range of digestive processes and the corresponding digestive system of different animals.
- 5. Identify favourable environmental conditions for different groups of animals.

## **Unit: Principles of Animal Grooming**

Unit level (MQF): 3

Credits: 6

#### **Unit description**

Throughout the years, man domesticated pets for, work and protection needs. Nowadays, the domestication of pets extends to breeding pets for show, and for pets. Business related to pets in Malta is increasing while traditional livestock husbandry is declining.

This unit aims to provide the learner with an understanding of the principles of pet grooming and their application in pet care.

The learners will also learn to distinguish and describe the most important pet species and breeds. For the most important species they will study pet behaviour, and their needs for care and attention. In addition, the learner will learn how to approach, handle, bathe and groom pets.

Pets are often bred for show. Hence, the learner will be introduced to breeding standards, and desired traits and conformities of pets for show.

The unit contains hands-on learning where learners will be introduced to safe and competent use of grooming tools.

## **Learning Outcomes**

- 1. Identify the most common pet species and breeds.
- 2. Understand the importance of pet grooming.
- 3. Perform pet grooming safely using the appropriate products tools and methods.
- 4. Identify different types of grooming tools and their uses.

## Unit: Principles of Animal Nursing

Unit level (MQF): 3

Credits : 6

#### **Unit description**

An important element in the care of animals is the provision of basic care and first aid to prevent and limit the effects of diseases and injury. This unit will provide learners with the basic knowledge about principles of animal nursing and their application. Learners will learn how to approach and observe animal behaviour and provide basic care for animals.

This unit will look at the most common domesticated pets/ animals and the related care provision. Consequently, learners will be exposed to observation and record keeping routines, the measurement of basic vital health parameters and their normal values and daily animal nursing routines.

The legal, ethical and safety aspects of animal nursing will also be covered together with the performance of nursing techniques according to established guidelines.

This unit will provide opportunities for learners to practice nursing techniques and tools in the proper manner. Learners will also be familiarised with the main veterinary institutions and firms in Malta.

#### **Learning Outcomes**

- 1. Understand legal, ethical and safety aspects of veterinary nursing.
- 2. Recognize the signs of good and ill health in animals.
- 3. Apply the best practices of nursing care and patient management.
- 4. Understand the applications of animal first aid principles.
- 5. Outline the tools and basic equipment commonly used in veterinary practice.

## Unit: Basics of Animal Care Technology

Unit level (MQF): 3

Credits: 3

#### **Unit description**

This unit will introduce learners to animal care mechanisation and equipment. Learners will also be familiarised with the basic checks and necessary remedies for common faults and breakdowns. Modern animal breeding is heavily dependent on mechanisation which is becoming more complex because of progress in technology.

Learners will learn about tools, machines and equipment used for different purposes in animal care, namely feeding, watering, cleaning and manure handling as well as heating and cooling.

Learners will also have the opportunity for hands-on learning to acquire the necessary skills necessary for a job in animal care sector. The hands-on learning will involve mainly small scale machines and equipment.

### **Learning Outcomes**

- 1. Explain the function of common animal feeding and watering equipment for different animals.
- 2. Describe different cleaning and manure handling techniques.
- 3. Understand heating and cooling systems in animal husbandry.
- 4. Understand a wide range of faults/breakdowns that might occur to various equipment/machines.

### **Unit: General Animal Husbandry**

Unit level (MQF): 3

Credits: 6

#### **Unit description**

Animal husbandry is an important component of the Maltese agricultural scene. Consequently, the agribusiness sector requires people with the proper knowledge, skills and competences.

This unit will provide learners with general knowledge, principles and information which are common to different domesticated and pet animals.

This unit will introduce learners to the basic animal needs for feeds and water and the proper feeding practices and nutritional value of feeds according to the different species. Learners will also be exposed to different animal breeding systems and related environmental issues.

Such issues also include animal housing systems both for micro and large scale projects which is in accordance to the legal framework regarding animal breeding standards and registers, sanitary and animal welfare requirements.

An introduction to the local market and the marketing of animal products will also be covered.

### **Learning Outcomes**

- 1. Explain the nutritional needs and water requirements of different animals.
- 2. Understand the differences between various types of feeds and meals.
- 3. Describe the main features of different animal farming systems.
- 4. Understand the main construction and functional features of different animal housing systems.
- 5. Understand the legal requirements of keeping and marketing of animals.

### **Unit: Breeding of Rabbits**

Unit level (MQF): 3

Credits: 6

#### **Unit description**

The breeding of rabbits is considered as a key agribusiness sector in Malta, both in terms of commercial meat production, due to rabbit being a Maltese traditional dish, and also for rabbit shows.

This unit will familiarise learners with the particular care required in the breeding of rabbits. This unit will look at the origin, history and process of domestication of rabbits.

Learners will also look at the requirements of breeding rabbits in terms of feed, water and climate conditions. Learners will also be exposed to specific housing requirements, machinery and equipment. Learners will also consider the economic significance and production features of different breeds and hybrids of rabbits. In this unit learners will also look at the specific morphology, reproduction, physiology, genetics, specific diseases, disorders and their treatments. Besides emphasising the breeding of rabbits, the aim of this unit is to build on the knowledge gained in the units Animal Science, General Animal Husbandry and Basics of Animal Care Technology.

#### **Learning Outcomes**

- 1. Outline the history and phenotypic particularities of common rabbit breeds and hybrids.
- 2. Explain adequate feed, water and housing conditions for rabbits at different growth stages.
- 3. Apply adequate preventive and curative measures against diseases, parasites and disorders common in rabbits.
- 4. Explain the reproductive system and the reproduction phases of rabbits.
- 5. Describe the rabbit meat market conditions and the importance of humanely slaughtering rabbits for meat production.

### **Unit: Apiculture**

Unit level (MQF): 3

Credits: 3

#### Unit description

Beekeeping is an agricultural industry having a positive impact on flowering plants. The honey bee is primarily kept for the production of honey and related by-products. The aim of this unit is to enhance knowledge gained in the units Animal Science, General Animal Husbandry and Basics of Animal Care Technology in relation to apiculture.

This unit will familiarise learners with the particularities of beekeeping. The unit will look at the history of beekeeping, the significance and use of honeybee products and the impact of honeybees on flower pollination.

This unit will also look at specific honeybee morphology, reproduction, diseases, disorders and their treatments. Importance will be given to the role of the honeybee in fighting against the Varroa mite. Since honeybees gather and live in colonies, a special emphasis will be given to different members of the colony, the structure of the colony and the hierarchy of the colony.

Requirements for beekeeping in terms of feed, water and climate conditions will be discussed. The unit will also introduce learners to the basics of honeybee housing, handling techniques and ways of transportation. Learners will also be exposed to standard techniques in beekeeping which include observing and inspecting colonies and hives, preventing swarming, maintaining hives and frames, and harvesting of honey.

### **Learning Outcomes**

- 1. Recognise the ecological and economic importance of beekeeping.
- 2. Understand the honey bee morphology, reproduction and digestion.
- 3. Describe the honey bee colony structure and hierarchy.
- 4. Describe the standard techniques in taking care of honey bee colonies.