Course Syllabus

Course: *Animal Husbandry in the Mediterranean* Department: *Biology* Host Institution: *University of Nicosia, Cyprus*



Course Summary

| Course Code | Course Title | ECTS Credits |
|----------------|---------------------------------------|-------------------------|
| BIOL-215 | Animal Husbandry in the Mediterranean | 6 |
| Subject | Contact Hours | Prerequisites |
| Animal Science | 42-45 | Two Biology Courses |
| Department | Level of Course | Language of Instruction |
| Biology | Upper-Division | English |

Course Description

This course focuses on the basic principles of Animal Husbandry with particular reference to the aspects of animal production that are of great economic importance to livestock industry in Cyprus and the Mediterranean region. It focuses on the breeds of farm animals, management, feeding and welfare, as well as on the problems associated with climate change in the region. By the end of the course students will have a clear view of the animal production industry in Cyprus. Classroom sessions will be supplemented with visits to farms for a first-hand experience of the issues examined in class.

Prerequisites (if applicable)

Junior Standing, Two College-Level Biology Courses.

1. Introduction of Animal husbandry in Cyprus

- 1.1 Overview of Cypriot Livestock
- 1.2 Changes and trends in the consumption of animal products
- 1.3 By-products from animals
- 1.4 Protected designation of origin (PDO) products from Cyprus
- 2. Raising Dairy and Beef Cattle
 - 2.1 Changes and trends in the industry
 - 2.2 Dairy breeds
 - 2.3 Milk and meat production and marketing
 - 2.4 Housing Systems
 - 2.5 Reproduction, Feeding and nutrition
 - 2.6 Milking parlour hygiene and management
 - 2.7 Heat stress related management practises and welfare issues
 - 2.8 Environmental footprint

3. Raising Sheep and Goats

- 3.1 Changes and trends in the Cypriot industry
- 3.2 Breeds of Sheep and Goats
- 3.3 Production systems
- 3.4 Breeding and reproduction
- 3.5 Feeding and nutrition
- 3.6 Lambing management
- 3.7 General management considerations and issues

4. Raising Pigs

- 4.1 Overview of the Cypriot industry
- 4.2 Breeds and their selection
- 4.3 Housing conditions and equipment
- 4.4 Nutrition and feeding
- 4.5 Routine management of sows, weaners, growers and fatteners
- 4.6 Breeding and reproduction
- 4.7 Heat stress related management practises and welfare issues
- 4.8 Environmental footprint

5. Raising Chickens

- 5.1 Overview of the Cypriot industry
- 5.2 Breeds and their selection
- 5.3 Housing conditions and equipment
- 5.4 Nutrition and feeding
- 5.5 Routine management of layers and broilers
- 5.6 Breeding and reproduction
- 5.7 Hatchery management and equipment
- 5.8 Heat stress related management practises and welfare issues

6. Raising Rabbits

- 6.1 Overview of the Cypriot industry
- 6.2 Domesticated rabbits in Cyprus
- 6.3 Breeds
- 6.4 Rabbit husbandry-handling rabbits
- 6.5 Housing and feeding
- 6.6 Rabbit health and common illnesses
- 6.7 Breeding and Reproduction

Evaluation and Grading

Midterm Exam: 20%

Final Exam: **40%** In-Class Participation: **20%** Field Study Participation: **20%**

Readings and Resources

Required Texts

Handouts and Articles Provided.

Optional Reading

- 1. Monroe W. Strickberger. Genetics. The Macmillan Company. NY.
- 2. John F. Lasley. Genetics of livestock improvement. Prentice-Hall, inc. New Jersey.
- 3. I. Michael Lerner. The genetic basis of selection. Greenwood press, Connecticut.
- 4. P. McDonald et al. Animal Nutrition. Upper Saddle River, NJ: Pentice Hall, Willey, 2005, 5th Edition.
- 5. Richard O. Kelmers, D.C. Church. Livestock Feeds and Feeding. Boston: Prentice Hall, c2010, 6th Edition.
- 6. Tisch David. Animals Feeds, Feeding & Nutrition and Ration Evaluation. Clifton Park, NY: Thomson Delmar Learning 2005.
- 7. Dairy Sheep Nutrition / Edited by G. Pulina. Oxfordshire, OX, UK; Cambridge, MA, USA: CABI Pub., c2004.

Other Academic Policies

Class attendance is compulsory. If unable to attend a class, students must inform the course lecturer in advance. A maximum of 20% excused absences is tolerated; however beyond this percentage, students will be withdrawn from the course. Moreover, any work missed due to absence must be completed on return to class.