Course Syllabus

Course: Animal Husbandry

Department: Biology

Host Institution: University of Nicosia, Cyprus



Course Summary		
Course Code	Course Title	ECTS Credits
BIOL-215	Animal Husbandry	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 covering breeds of farm animals (including aquaculture), management, feeding and welfare. Changes and trends in the industry and the role of animal production in the economy are also examined. By the end of the course students will have a clear view of the animal production industry. 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.

Course Outline

1. Introduction of Animal husbandry

- 1.1 Introduction to Animal husbandry
- 1.2 Changes and trends in the consumption of animal products
- 1.3 Animal-derived products
- 1.4 The role of animal production in the economy

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 parlor hygiene and management
- 2.7 Environmental footprint

Course Outline (continued)

3. Raising Sheep and Goats

- 3.1 Changes and trends in the 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 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
- 4.8 Environmental footprint

5. Raising Chickens

- 5.1 Overview of the 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

6. Raising Rabbits

- 6.1 Overview of the industry
- 6.2 Breeds
- 6.3 Rabbit husbandry-handling rabbits
- 6.4 Housing and feeding
- 6.5 Rabbit health and common diseases
- 6.6 Breeding and Reproduction

7. Equines

- 7.1 Overview of the equine industry
- 7.2 Breeds
- 7.3 Equine husbandry and handling
- 7.4 Breeding and reproduction
- 7.5 Equine health and common diseases
- 7.6 Welfare of the equine athlete

8. Aquaculture

- 8.1 Overview of the aquaculture industry
- 8.2 Species
- 8.3. Management systems
- 8.4 Aquaculture nutrition
- 8.5 Aquaculture reproduction
- 8.6 Aquaculture health management

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.