Code: 1530 **Advance Techniques of Animal Production - Other, than milk and meat**

Degree: 2nd cycle – Animal Production Engineering
Curricular Year: 1st **Semester Course: 2nd**
Credits: 6 ECTS **Compulsory**
Language: Portuguese/English
Responsible: Rui Manuel Vasconcelos Horta Caldeira (FMV)
Other lecture(s): Maria Madalena dos Santos Lordelo**,** Rui Branquinho Bessa (FMV), Luísa Almeida Lima Falcão e Cunha, Fernando Ribeiro Alves Afonso (FMV), Ilda Maria Neto Gomes Rosa (FMV), António Manuel Dorotêa Fabião and António S. Ferreira Henriques Barreto (FMV)
Web Site: http://www.isa.utl.pt/home/node/3864

1. Contact hours:
Lectures 42 **Lecture/Practicals** 28 **Others** 14 **Total** 84

2. Objectives:

An advanced comprehension of animal production systems and techniques beyond meat and milk production, namely eggs, aquatic species and horses. General and applied concepts about products with a minor expression will also be focus (dogs, game species, fur and hair, honey).

3. Programme:

1. Eggs for consumption and incubation. Factors influencing egg size and egg components. Artificial insemination in poultry. New technologies in egg production such as in-ovo feeding and specialized chick feeding immediately after hatching.
2. Aquatic species production. Processing, quality and consumption of aquatic products. Manipulation, conservation, processing and development of new products. Factors that are involved with perishability and the biohazards associated with fisheries and aquaculture products.
3. Horse production. End products of horse production. Growth and development of horses. Genetic and environmental factors that shape the characteristics of the end products of horse production. Factors that affect the productive efficiency of horse production.
4. Game species production.
5. Dog breeding.
6. Fur and hair production.
7. Honey production.

4. Bibliography:

Main Bibliography

Class handouts, lecture notes, scientific and technical papers.

Other Bibliography

Reproduction in Poultry. Etches, R. J.. CAB International. Guelph, Ontario, Canada, 1996.
Egg and egg shell quality. Solomon, S. E.. Wolfe Publishing Limited, 1991.
Poultry Breeding and Genetics. Crawford, R. D.. Elsevier. Canada, 1990.
Venugopal, V. Seafood Processing. Taylor and Francis. 2006.
Parker, R. Aquaculture Science. 2nd Edition.Delamar. 2002.
Zootecnia – Bases de Producción Animal, Carlos Buxadé, Ediciones Mundi-Prensa, Madrid, Espanha.
Feeding and care of the horse, Lon D. Lewis, 2nd ed. 1996, Lippincott Williams & Wilkins, USA

5. Assessment:

The students' learning is evaluated by a written examination.

6. Estimated Workload:	168	Hours
7. Last Update:	14/7/2010	