

**ACADEMIC YEAR: 2017-2018** 

COURSE: SUSTAINABLE ANIMAL HUSBANDRY

TYPE OF EDUCATIONAL ACTIVITY: BASIC

**TEACHER:** Carlo Cosentino

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Language: Italian

**ECTS:** (lessons/tutorials/practice): **6** 

(5 frontal lectures = LF +

1 practice = E)

n. of hours: 56

40 hours LF

16 hours E

Campus: Potenza

School: SAFE (School of Agriculture, Forest, Food and Environmental Semester:

Sciences)

Program: LT - CL25 Forest and

**Environmental Sciences** 

### **EDUCATIONAL GOALS AND EXPECTED LEARNING OUTCOMES**

The main aim of course will be to provide needed understanding and knowledge to acquire planning and management capacity of livestock farms with emphasis on semi-extensive and extensive farming systems.

- Knowledge and understanding: knowledge and understanding of the general principles
- Applying knowledge and understanding: ability to read and write the formulas of the most common productivity, sustainability and zootechnical calculations
- Make judgments: ability to select and apply the best procedure for solving simple assessments and zootechnical designs
- Communication skills: ability to organize in a logical way and to communicate, using an appropriate and correct language as well, the acquired knowledge.
- Learning skills: ability to collect and organize in a functional way the information coming from class lectures, suggested books, and literature data.

PREREQUIREMENTS None



#### **SYLLABUS**

#### LIVESTOCK PRODUCTION (ECTS 1 = 8h LF)

Farming systems. Livestock breeding in protected areas and interactions with livestock (PAC regulations). Disciplinary production (EC Reg. 2529). Grid EEC, slaughter and meat input (Decree Law 286/1994 and R.D. 3298). Production, processing and marketing of milk (DPR 54/97 and 92/46 and 92/47 EEC and DM 185/91).

### LIVESTOCK BIODIVERSITY (ECTS 2 = 8h LF)

Elements of reproductive physiology. Morphological and functional characteristics of farm animal. Animal productions and market.

#### LIVESTOCK SYSTEMS (ECTS 3 = 8h LF)

Methods for evaluating the efficiency of livestock production. Influence of rearing system, of feeding, of milking rooms etc. The RSP, systems and organizations for the development and implementation of livestock.

## LACTOGENESIS AND GALACTOPOIESIS (ECTS 4 = 8h LF)

Lactogenesis and galactopoiesis in relation to genetic and environmental factors conditioning the function. Breeding technologies in relation to the type of production for each species, breed, and genetic type.

### **MEAT PRODUCTION (ECTS 5 = 8h LF)**

Meat production, in relation to genetic and environmental factors. Basic elements to improve the quality production and knowledge about farming systems in relation to the corporate system.

#### FRONTAL EXERCISES AND EXERCISE EXTERIOR VIEWS (ECTS 6 = 16 h E)

Frontal exercises: calculation of the sustainable load in relation to the Nitrates Directive.

Exercise exterior views: on farms and/or trade fairs

# TEACHING METHODS

40 hours of lessons with Movies, P. Point, PDF; 16 hours of practices for calculation of procedures and / or for technical visits to farms (to see a number of technical and operational aspects of livestock).

### **EVALUATION METHODS**

The aim of the examination is to test the level of understanding of educational goals. The exam consists of a written examination (time available one hour, it is not allowed to consult texts or use PCs and smartphones): open and multiple questions; exercises concerning sustainable animal load. This test evaluates the learning of topics course and it is a selection for oral examination. The student who does not show sufficient knowledge of topics is not admitted to the next oral examination .

### **TEXTBOOKS AND ON-LINE EDUCATIONAL MATERIAL**

- ANTONGIOVANNI M., e GUALTIERI M., Nutrizione e alimentazione animale. Edagricole, Bologna, 1998.
- APA-Regione Basilicata Latronico (PZ) 1995 L'allevamento ovino e caprino in Basilicata orientamento, attività selettiva e patologie.
- BALASINI D., Bovini e bufalini. Edagricole, Bologna, 2000.
- BALASINI D., Ovicaprini. Edagricole, Bologna, 2000.
- BALASINI D., Suini. Edagricole, Bologna, 2000.
- BALASINI D., Equini. Edagricole, Bologna, 2000.
- BALASINI D., Zootecnica Speciale –Edagricole Bologana-1990;
- BETTINI T.M. Elementi di Scienza delle produzioni animali, Edagricole, BO, 1987;
- BONADONNA T. Etnologia zootecnica, Utet, Torino, 1976.



- BORGIOLI E., Genetica e miglioramento degli animali agricoli. Edagricole, B0, 1993.
- DAVID SAINSBURY. Farm Animal Welfare. Collins, 1986.
- DERIVAUX J.,- Riproduzione degli animali domestici I Fisiologia Patron, B0 –1974;
- GRAU R., Scienza della carne. Edagricole, Bologna, 1984.
- MONETTI P.G. 2001. Allevamento dei bovini e dei suini. C. Giraldi Editore, BO.
- HOUPT K.A. Il comportamento degli animali domestici. EMSI, Roma, 2003.
- PARIGINI BINI R., Le razze bovine. Patron, Bologna, 1983
- PARIGINI BINI R., SAMEDA, DE MARCO A., Zootecnica speciale dei bovini, vol. I e II. Patron, Bologna, 1989
- PORTOLANO N. Igiene dell'allevamento ovino e caprino Edagricole B0,-1987;
- PULINA G. L'alimentazione degli ovini da latte Avenue media Bologna- 2001;
- REGIONE BASILICATA Dipartimento Agricoltura 1999 Guida pratica alle norme igienico sanitarie per la produzione e trasformazione del latte in azienda;
- SUCCI G., La vacca da latte. Città Studi, Milano, 1993.
- SUCCI G. Zootecnia speciale, Clesav, Milano, 1983.
- TORTORELLI N. Zootecnica Speciale, Edagricole, Bologna, 1984.
- UNAPOC MIPA –Roma –1992 Ovinicoltura;
- ZUCCHI G., Zooeconomia Economia del sistema delle produzioni animali Avenue media – Bologna- 2001

Part of the course material will be provided by the teacher, another part is available on the World Wide Web system and on the website



http://www.biodiversitazootecnica.it

### **INTERACTIONS WITH STUDENTS**

At the beginning of the course, after describing the objectives, program and methods of verification, the teacher provides students educational materials. Simultaneously, it collects a list of students who intend to enroll in the course, together with name, serial number and e-mail. Through mailing list will be sent slides and P.Point, PDF, Scientific articles, links to related sites Topics covered etc.)

Office hours: Tuesday, Wednesday and Thursday from 16:30 to 18:30

In addition is available at all times for a contact with the students, through e-mail carlo.cosentino@unibas.it and phone number 0971.205044.

### **EXAMINATION SESSIONS (Forecast)**

Usually the third Friday of every month (except August)

### **EVALUATION BOARD**

Carlo Cosentino Pierangelo Freschi Ada Braghieri

SEMINARS BY EXTERNAL EXPERTS YES