# .- Zootechnical Production: Monogastrics

## Prof. Aldo Prandini

***COURSE AIMS AND INTENDED LEARNING OUTCOMES***

The course aims to provide students with technical and scientific knowledge on breeding the main monogastric species (pigs, poultry). The aim of the course is to provide knowledge to optimize zootechnical performance, to maintain an optimal level of health, in breeding conditions that guarantee animal welfare and are able to maintain a high level of quality and safety of the animal products obtained.

At the end of the course the student will be able to learn the main techniques related to the breeding of pigs and poultry. He will know the foods, their composition and evaluation, the feeding technologies that allow the production of high quality animal products (pork and poultry and eggs) also according to the regulations of the main Italian PDO products. The student will be able to understand which are the main productive variables that allow the production of safe animal products, in conditions of animal welfare and with low environmental impact farming methods

***COURSE CONTENT***

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|  | ECTS |
| *Zootechnical productions*: national and world production of species of zootechnical interest Production and consumption of meats and eggs. | 0.50 |
| *Anatomy and physiology:* notes on the anatomy and comparative physiology of monogastrics. | 1.50 |
| *Meat production:* techniques for raising and feeding pigs (light and heavy) and poultry (broilers, turkeys). Slaughter. Influence of genetic and environmental factors on the organoleptic, technological and nutritional characteristics of meat and processed products. | 4.00 |

*Egg production:* rearing and feeding techniques for pullet and laying 2.00

hens. Influence of genetic and environmental factors on the organoleptic,

technological and nutritional characteristics of eggs for fresh consumption and for industry.

***READING LIST***

P.G. Monetti, *Allevamento dei bovini e dei suini,* Giraldi Editore, Bologna, 2001.

P.G. Monetti, *Appunti di suinicoltura,* Giraldi Editore, Bologna, 1997.

F. Bertacchini-I. Campani, *Manuale di allevamento suino,* Edagricole, Bologna, 2011.

I. Giavarini, *Tecnologie Avicole,* Edagricole, Bologna.

G. Succi, *Zootecnia Speciale,* Città Studi, Milano, 1995.

Another reading list containing single subject works and updates will be indicated during the course.

***TEACHING METHOD***

Frontal lectures, at which the founding principles of the subject will be presented with the aid of PowerPoint presentations and videos taken from the internet, so offering a practical illustration of the topics covered in class.

Following each lecture, all material will be made available on the Blackboard platform.

The course will be supplemented with seminars on specific subjects related to the topics covered in class, and involving invited recognised experts from the feed industry sector and AUSL (local health units).

Educational visits to commercial pig and poultry farms will also take place, and will include the assistance of breeding technicians.

***ASSESSMENT METHOD AND CRITERIA***

The exam will be in two parts: a written interim test and a final oral exam. The interim test, written in the middle of the course, is optional and will cover that part of the programme taught to date. Should a student pass the interim test, they will be exempted from covering the interim programme in the final oral exam; those students who fail, or don't take, the interim test, will have to cover the entire programme in the final oral exam.

***NOTES AND PREREQUISITES***

Students must possess a basic knowledge of organic chemistry and biochemistry.

Information on office hours available on the teacher's personal page at <http://docenti.unicatt.it/>.

In case the current Covid-19 health emergency does not allow frontal teaching, remote teaching will be carried out through synchronous or asynchronous procedures that will be promptly notified to students