General Information	
Academic subject	Technologies of Animal Husbandry (module of the integrated course: Animal Husbandries)
Degree course	Agricultural Sciences and Technologies
Curriculum	Rural Systems
ECTS credits	6 ECTS (5 ECTS Lectures + 1 ECTS Laboratory or field classes)
Compulsory attendance	No
Language	Italian

Subject teacher	Name Surname	Mail address	SSD
	Angela Gabriella D'Alessandro	angelagabriella.dalessandro@uniba.it	AGR/19

ECTS credits details			
Basic teaching activities			

Class schedule	
Period	First semester
Year	Third year of the degree course
Type of class	Lecture - Laboratory or field classes

Time management	
Hours	150
In-class study hours	60
Out-of-class study hours	90

Academic calendar	
Class begins	28 September 2020
Class ends	22 January 2021

Syllabus	
Prerequisites/requirements	Knowledge of anatomy, physiology, morphology, genetics and genetic improvement of livestock.
Expected learning outcomes (according to Dublin Descriptors)	• *Knowledge and understanding* o Knowledge of livestock breeding techniques and improvement of their quantitative and qualitative productivity. • *Applying knowledge and understanding* o Ability to apply breeding technologies in accordance with animal welfare and environment safeguard. o Ability to evaluate the qualitative characteristics of animal products. o Ability to identify and apply integrated breeding technologies addressed to the quantitative and qualitative improvement of animal productions. • *Making informed judgements and choices* o Ability to analyse different production systems. o Ability to design, manage and verify breeding technologies addressed to the quantitative and qualitative improvement of the productions, in accordance with animal welfare and environmental safeguard. • *Communicating knowledge and understanding*

	○ Ability to communicate effectively within a workgroup. ○ Ability to communicate effectively with operators and technicians of the production chains, as well as with managers of public and / or private bodies. • *Capacities to continue learning* ○ Ability to deepen and update the knowledge of specific and related sectors, following a multidisciplinary approach. The expected learning outcomes, in terms of know how and skills, are listed in the Attachment A of the Academic Regulation of the Agricultural Science and Technology Degree Program (expressed through the European Describers of the educational qualification).
Contents	○ Production and consumption of animal products from the different species, in Italy and EU. ○ Morphological and functional characteristics of the main breeds used for milk (in cattle, sheep, goat and buffalo species) and meat (in cattle, sheep, goat, buffalo and pig species). ○ Reproductive parameters of the main species. Notes on reproductive technologies and biotechnologies. ○ Breeding technology for milk and meat production in the main species. Milk and meat quality parameters and their influencing factors. ○ Systems and technology of poultry breeding for meat and egg productions. Quality of eggs. ○ Notes on organic animal productions and animal welfare. ○ Notes on quality management systems, certification, traceability and food safety in animal productions.
Course program	
Bibliography	• Notes of the lectures handed out during the course. • R. Bortolami, E. Callegari, V. Beghelli. Anatomia e Fisiologia degli Animali Domestici, Calderini Editore. • D. BALASINI – Zootecnica. Basi Tecnico-Scientifiche. Calderini Edagricole. Volumi: Bovini e Bufali, Suini, Avi-Cunicoli, Ovi-Caprini. • Cerolini S., Marzoni M., Romboli I., Schiavone A., Zaniboni L. - Avicoltura e Coniglicoltura. Le Point Veterinaire, Milano. Additional reading materials: • G. Aguggini, V. Beghelli, L.F. Giulio. Fisiologia degli Animali Domestici con Elementi di Etologia. UTET. • G. Bittante, I. Andrighetto, M. Ramanzin. Tecniche di Produzione Animale. Ed. Liviana. • E. Baldelli. La Zootecnia Bioecologica. Edagricole. • G.M. Tantillo. La produzione igienica della carne. Edagricole. • N. Montemurro. Igiene zootecnica. Come favorire la salute e il benessere degli animali in allevamento. Edagricole.
Notes	
Teaching methods	Lectures will be given with the support of PC assisted tools (PowerPoint, Adobe Acrobat, etc.), in depth video showing and technical visits to livestock farms.

Assessment methods	For students enrolled in the academic year in which teaching is carried out, there is a mid-term exam consisting in an oral test. The outcome of this test, if with a positive vote, contributes to the evaluation of the final exam and is valid for one academic year. Students who fail the first mid-term exam must attend the general exam. The exam consists of an oral test related to the subjects on the syllabus covered during the theoretical and theoretical/practical lessons in classroom and production farms, as stated in the Academic Regulation of the Agricultural Science and Technology Degree Program and its relative study plan (Attachment A). The student competence evaluation is based on predefined criteria, as detailed in Attachment A of the Academic Regulation of the Degree Program. Final grade for students taking both mid-term and final exam is determined by the arithmetic average of the two grades.
Evaluation criteria	• *Knowledge and understanding* o Level of detail in describing the breeding techniques of livestock in relation to the species and the purpose of production. o Level of detail in describing the qualitative characteristics of animal products and of systems designed to improve them. • *Applying knowledge and understanding* o Methodological approach in the description of the breeding technologies and quality characteristics of the products. o Identification of production management systems according to the best practices. • *Making informed judgements and choices* o Ability to analyze different production systems. o Ability to design, manage and verify breeding technologies addressed to the quantitative and qualitative improvement of the productions. • *Communicating knowledge and understanding* o Effectiveness and clarity in the exposure of the topics. • *Capacities to continue learning* o Level of in-depth and of multidisciplinary linkage of the knowledge in the topics discussed.
Official consulting hours	From Monday to Thursday, h 15:00 – 17:00 by appointment.