Stampare su carta intestata del CdS

General information	
Academic subject	Technologies of Animal Husbandry (module of the integrated course: Animal Husbandries)
Degree course	Agricultural Sciences and Technologies – Curriculum Rural Systems
Academic Year	Third
European Credit Transfer and Accumulation System (ECTS)	6
Language	Italian
Academic calendar (starting and ending date)	27th September 2021 – 21st January 2022
Attendance	Not mandatory

Professor/ Lecturer	
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Department and address	Dept. of Agricultural and Environmental Sciences - Zootecnia, ex Facoltà di Agraria (Campus), second scale entry, second floor, Room N. 19
Virtual headquarters	Platform TEAMS – Unique code: 4b6q5fd
Tutoring (time and day)	From Monday to Thursday, h 15:00 – 17:00 by appointment, in the presence or by virtual meeting.

Syllabus	
Learning Objectives	The Course is aimed at supplying basic knowledge about technologies of animal husbandry and quality of the productions in the different animal species of zootechnic interest. It will deal with the aspects concerning breeding systems and technologies as for the main productive livestock, especially referring to the quality characteristics of productions and the main factors affecting them. Furthermore, it will give an outline of organic productions, animal welfare, food safety and traceability of animal productions.
Course prerequisites	Knowledge of anatomy, physiology, morphology, genetics and genetic improvement of livestock.
Contents	o Production and consumption of animal products from the different species, in Italy and EU. o 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). o Reproductive parameters of the main species. Notes on reproductive technologies and biotechnologies. o Breeding technology for milk and meat production in the main species. Milk and meat quality parameters and their influencing factors. o Systems and technology of poultry breeding for meat and egg productions. Quality of eggs. o Notes on organic animal productions and animal welfare. o Notes on quality management systems, certification, traceability and food safety in animal productions.
Books and 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 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.

Work schedule			
Total	Lectures	Hands on (Laboratory, working groups, seminars, field trips)	Out-of-class study hours/ Self-study hours
Hours			
150	32	28	90
ECTS			
6	4	2	

Teaching strategy	
	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.
Expected learning outcomes	
Knowledge and understanding on:	Knowledge of livestock breeding techniques and improvement of their quantitative and qualitative productivity.
Applying knowledge and understanding on:	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.
Soft skills	• *Making informed judgments 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* o Ability to communicate effectively within a workgroup. o 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* o Ability to deepen and update the knowledge of specific and related sectors, following a multidisciplinary approach.

Assessment and feedback	
Methods of assessment	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 Course (expressed through the European Describers of the educational qualification). 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. 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).
Evaluation criteria	• *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. • *Autonomy of judgment* 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* o Ability to communicate effectively within a workgroup. o Ability to communicate effectively with operators and technicians of the production chains, as well as with managers of public and / or private bodies. • *Communication skills* o Ability to communicate effectively within a workgroup o 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* o Ability to deepen and update the knowledge of specific and related sectors, following a multidisciplinary approach.
Criteria for assessment and attribution of the final mark	The student competence evaluation is based on predefined criteria, as detailed in Attachment A of the Academic Regulation of the Degree Program. Students who fail the first mid-term exam must attend the general exam. Final grade for students taking both mid-term and final exam is determined by the arithmetic average of the two grades.
Additional information	