

General Information	
Academic subject	Zootechnical Management of the Agro-Forestry Territory (module of the integrated course: Plant and Animal Wild Resources of the Agro-Forest Territory)
Degree course	Agro-Environmental and Territorial Sciences
Curriculum	
ECTS credits	3 ECTS (2 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	Second year of the degree course
Type of class	Lecture; Laboratory or field classes; Seminars on specific topics that will be defined during the course

Time management	
Hours	75
In-class study hours	30
Out-of-class study hours	45

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

Syllabus	
Prerequisites/requirements	Knowledge on the livestock species, systems and technologies for their productions, animal products and their quality.
Expected learning outcomes (according to Dublin Descriptors)	<ul style="list-style-type: none"> • <i>Knowledge and understanding</i> <ul style="list-style-type: none"> ○ Knowledge on the relationships among the environment and livestock production systems, types of farming, ecological aspects, animal welfare and quality of their products. • <i>Applying knowledge and understanding</i> <ul style="list-style-type: none"> ○ Ability to apply, in the different agro-forestry systems, the breeding techniques in accordance with environmental sustainability, animal welfare and quality of the products. • <i>Making informed judgements and choices</i> <ul style="list-style-type: none"> ○ Ability to analyse different production systems in relation to the environmental and productive sustainability of livestock. ○ Ability to design, manage and verify the breeding technologies in order to improve the environmental and productive sustainability of livestock. • <i>Communicating knowledge and understanding</i> <ul style="list-style-type: none"> ○ Ability to communicate effectively within a workgroup.

	<ul style="list-style-type: none"> ○ Ability to communicate effectively with operators and technicians of the production chains, as well as with managers of public and / or private bodies. ● <i>Capacities to continue learning</i> ○ Ability to deepen and update the knowledge of specific and related sectors, following a multidisciplinary approach. <p>The expected learning outcomes, in terms of know how and skills, are listed in the Attachment A of the Academic Regulation of the Agro-Environment and Territorial Sciences Master Program (expressed through the European Descriptors of the educational qualification; area of interest: Production Disciplines).</p>
Contents	<ul style="list-style-type: none"> ○ Multifunctionality of animal husbandry in agro-forestry systems. ○ Distribution and consistency of species of zootechnical interest. ○ The livestock systems: elements of characterization and FAO classification. Pastoral, agro-zootechnical and industrial systems. ○ Intensive breeding and extensive breeding. The pasture: ecological aspects, animal welfare and quality of the livestock products. ○ Elements of bioclimatology. The main breeds of cattle, sheep, goats, pigs. ○ Production of milk and meat in extensive systems. ○ Sustainability of livestock systems. Autochthonous breeds and protection of biodiversity. ○ Breeding and management of the main species of fauna-hunting interest.
Course program	
Bibliography	<ul style="list-style-type: none"> ● Notes of the lectures handed out during the course. ● E. Baldelli. La Zootecnia Bioecologica. Edagricole. ● Modelli Zootecnici ai fini della sostenibilità. Consiglio per la Ricerca e la Sperimentazione in Agricoltura (CRA), 2009. ● G. M. Crovetto, A. Sandrucci. Allevamento Animale e Riflessi Ambientali. Edito a cura della Fondazione Iniziative Zooprofilattiche e Zootecniche – Brescia, 2010.
Notes	
Teaching methods	Lectures will be given with the support of PC assisted tools (PowerPoint slides), in depth video showing, group works and technical visits to livestock farms.

Assessment methods	<p>For students enrolled in the academic year in which teaching is carried out, there is a mid-term exam consisting in an oral test on arguments developed during theoretical and theoretical-practical lesson hours. The outcome of this test 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.</p> <p>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 Agro-Environmental and Territorial Sciences Master.</p> <p>The student competence evaluation, in both mid-term and final exam, is based on predefined criteria, as detailed in Attachment A of the Academic Regulation of the Master Program.</p> <p>Please note that in order to take the second mid-term exam, students must have passed the first one. Students who fail the first mid-term exam must attend the general exam.</p> <p>For the final exam, the student will present, in written or oral form, a deepening subject on a topic of the course, assigned by the teacher.</p> <p>Final grade for students taking both mid-term and final exam is determined by the arithmetic average of the two grades.</p>
Evaluation criteria	<ul style="list-style-type: none"> • <i>Knowledge and understanding</i> <ul style="list-style-type: none"> ○ Level of details in the description of existing relationships among systems and technologies of livestock husbandries, animal welfare, quality of the products and the agro-forestry environment. ○ Level of insight in describing the breeding systems addressed to the improvement of the environmental and productive sustainability. • <i>Applying knowledge and understanding</i> <ul style="list-style-type: none"> ○ Methodological approach in describing issues related to the sustainability of the livestock productions in relation to the agro-forestry systems. ○ Capacity to analyse the environmental impact of livestock production systems in the agro-forestry systems. ○ Finding of functional management of livestock production systems according to sustainability criteria. • <i>Making informed judgements and choices</i> <ul style="list-style-type: none"> ○ Ability to analyse different production systems in terms of sustainability. ○ Capacity to design, manage and verify sustainable breeding technologies of livestock in the agro-forestry systems according to sustainability criteria. • <i>Communicating knowledge and understanding</i> <ul style="list-style-type: none"> ○ Effectiveness and clarity in the exposure of the topics. • <i>Capacities to continue learning</i> <ul style="list-style-type: none"> ○ Level of in-depth and of multidisciplinary linkage of the knowledge in the topics discussed.
Official consulting hours	From Monday to Thursday, by appointment.