Basic data of the subject	
University:	**University "Ukshin Hoti" Prizren**
Academic unit:	**Faculty of Life and Environmental Sciences**
Study program:	**Agribusiness management**
Course title:	**Animal Production Technology**
Level:	**Master**
Course status:	**Elective (E)**
Study year/semester:	**1 year / 1 semester**
Number of hours per week:	**2 + 1**
Credit value – ECTS:	**5**
Time / location:	**To be announced**
Lecturer:	**Prof. Dr. Hysen Bytyçi**
Contact details:	**hysen.bytyqi@uni-pr.edu; +383 44 196 235**
Course description	The course will help prepare qualified experts in the sciences of development and evaluation of technological procedures for animal breeding, mainly: Cattle, pigs, sheep, goats, poultry and horses. Furthermore, this course aims to help students gain a better understanding of technological systems of food production and the ever-increasing needs of food supply of animal origin, internal management and planning of livestock systems, their characteristics and importance, best animal production methods and techniques, guidelines, developments, recommendations and their meaning are treated and classified according to the criteria of competitiveness, food safety, their potential environmental impact and economic efficiency in Kosovo, the region and in the world. Examining global social and technological changes in agricultural restructuring will be approached, as well. Different evaluation methods are explained and critically discussed. Sample projects and case studies work will be used to illustrate and deepen students' knowledge.
Course objectives:	The course aims to increase students' knowledge about the development of the science of animal production by providing a complex and challenging understanding of the issue of food production and food safety of animal origin. This course examines the links between existing and contemporary animal production technologies, current food and animal feed / plant production systems, the environment, taking into account factors such as: production - competitiveness - farm economy, processing enterprise, trade, consumers and equality for international food law. Case studies will be used to examine these complex relationships, as well as alternative approaches to cover both: local and global animal food production, food security, and the public importance that foods play in health.
Learning outcomes:	Upon completion of the course, students will be able to: ▪ Classify existing and innovative process technologies and methods of livestock breeding using technological, functional, economic and economic criteria as well as environmental impact.

	▪ Develop and further evaluate livestock business administration procedures, system components and management strategies related to the legal, social and political framework. ▪ Know the different methods of collection, evaluation for the above criteria are known and they are able to discuss their suitability in terms of animal production and food safety in the world. ▪ Describe opportunities and challenges to encourage change in animal production behavior and support sustainable production, ▪ Improve the environmental impact of food production and consumption. ▪ Students can critically evaluate production systems in terms of methods, procedures and results achieved.

Contribution on student load (must correspond with learning outcomes)			
Activity	**Hours**	**Days/week**	**Total**
Lectures	2	15	30
Exercise theoretical/laboratory	1	15	15
Practice work	3	3	9
Contact with lecturer/consultations	1	12	12
Field exercises	3	2	6
Mid-terms, seminars	2	1	2
Homework	1	12	12
Individual time spent studying (at the library or home)	1	15	15
Final preparation for the exam	2	10	20
Time spent in evaluation (tests, quiz, final exam)	2	1	2
Projects, presentations, etc.	2	1	2
Total			125

Teaching methods:	Lectures, exercises, discussions, consultations, case studies, course projects, homework, midterm exam, final exam.
Examination methods:	Regular and active attendance: 10%, Midterm exam: 20%, Case study: 20% Seminar: 10%, Final exam: 40%.
Basic Literature:	W. Stephen Damron. 2012. Introduction to Animal Science (5th Edition). ISBN-13: 978-0132623896. Hysen Bytyqi. 2011. Basic Principles of Livestock Management. LAP LAMBERT Academic Publishing GmbH& Co. KG Address: Dudweiler Landstraße 99 66123 Saarbrücken, Germany. Norman N. Potter and Joseph H. Hotchkiss. Food Science 5th ed.

	1995. Chapmen and Hall, 115 fifth avenue New York, NY 10003. Alfred R. Conklin, Thomas Stilwell. World food. 2007 by John Wiley & Sons, Inc.
Additional Literature:	Hysen Bytyqi. 2011. Chapter in "Milk Production / Book 2", Chapter 11. "Effect of Environmental Sensitivity in Milk Production under Small-scale and Semi-extensive Conditions in Kosovo". ISBN 979-953-307-695-8. Dictionary of Food Science and Technology. Second Edition. International Food Information Service (IFIS Publishing) 2009. ISBN 978-0-86014-186-0. A John Wiley & Sons, Ltd., Publication . Rome Declaration on World Food Security. World Food Summit Rome, 13 November 1996. http://www.fao.org/docrep/003/w3613e/w3613e00.htm Livestock impacts on the environment. *Livestock's long shadow* (FAO, 2006). http://www.fao.org/corp/copyright/en/ Lecture materials and exercises (Handouts) prepared by the professor of the subject which will be delivered to students at the end of each lecture.

Designed study plan:	
Week	**Lectures which will be held**
First week:	The science of animal production technology as a separate discipline.
Second week:	Characteristics of the Food Industry of animal origin.
Third week:	Farm's animals. Meat, poultry, fish eggs and egg products milk and dairy products, food and human nutrition.
Fourth week:	Carbohydrates in food: Proteins in food: Fat and fat products. Other nutrients in food.
Fifth week:	Economic characteristics of farm breeding in the XXI century and the importance of human nutrition
Sixth week:	Food safety and animal nutrition. This section also contains the rules for re-circulating food processing products back into the food chain.
Seventh week:	Cereals and the role of conventional crop cultivation in the future (e.g., wheat production, etc.).
Eighth week:	Climate and food production Global challenges for livestock production (efficiency, environment, etc.).
Ninth week:	Biotechnology of animal production
Tenth week:	Animal mating technology system
Eleventh week:	Modern animal breeding understanding technologies.
Twelfth week:	Increasing food supply needs and storing animal products
Thirteenth week:	Genetically modified animals, their perspective.
Fourteenth week:	Perspectives in agriculture 2020-2030
Fifteenth week:	Agricultural and food policies

Academic policies and rules of conduct:

- Student should be aware of and respect the institution and Code of ethics.
- Student should respect the schedule of lectures, exercises and be attentive.
- It is mandatory possess and present student ID card in the mid-terms and exam,
- During compilation of course projects, student must adhere the instructions given by the professor.
- During the exam is forbidden the use of mobile phones.

Exercises

Designed study plan:	
Week	**Exercises which will be held**
First week:	Introduction to animal production technology
Second week:	Structure and function of products of animal origin
Third week:	Products of animal origin (Milk and Dairy products, meat and meat products, eggs, honey)
Fourth week:	Methods for determination of carbohydrates, proteins and fats in products of animal origin
Fifth week:	Economics, finance and markets, farming systems and enterprises, available markets, calculation of costs, returns and profits
Sixth week:	Food safety and sustainable production of animal products
Seventh week:	Cereal quality and methods for detecting cereal quality
Eighth week:	Produce for purpose, developing protective measures operations for selected animal products, identify quality criteria for selected animal products, monitor the impact of the climate/weather on livestock products
Ninth week:	The importance of Biotechnology in the development of animal products
Tenth week:	Nutrition values of products of animal origin
Eleventh week:	Principles of breeding and selection (Practical examples)
Twelfth week:	Systems ecology, natural resources used in agriculture, including soils, water and air, water cycles for the preservation of animal products
Thirteenth week:	Genetically modified foods of animal origin and their perspective
Fourteenth week:	Food pyramid and recommendations for the intake amount of products of animal origin
Fifteenth week:	Regulations and laws for the administration of products of animal origin