



Dual Curricula - Study and Work Practice in Agriculture and Food Safety (DualAFS)

GUIDE FOR IMPROVEMENT OF BACHELOR STUDY & PRACTICE IN ANIMAL PRODUCTION (AP)



Edited by Prof. Asoc. Dr. Alltane Kryeziu

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Prof. Dr. Skender Muji – Project Coordinator for University of Prishtina “Hasan Prishtina”

Prof. Dr. Bajram Berisha

Prof. Dr. Muhamet Kamberi

Prof. Asoc. Dr. Alltane Kryeziu

Prof. Dr. Arben Mehmeti

Prof. Ass. Dr. Muhamet Zogaj

Prof. Dr. Bedri Dragusha

This document was discussed with members of the Department of Biotechnology in Animal Science, members of the DualAFS Project Steering Committee and invited experts and from the private and public sectors as well as farmers of agriculture and livestock.

***Dual Curricula - Study and Work Practice in
Agriculture and Food Safety (DualAFS)***

BOOK TITLE:

***“GUIDE FOR DUAL STUDY & PRACTICE
IN AGRICULTURE AND FOOD SAFETY”***

BACHELOR STUDY PROGRAM

“ANIMAL PRODUCTION”

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1. Bachelor curricula in Animal Production (UPHP)

This guide provides general information on updating the re-accredited Bsc. Animal Production program in favor of practice within the limits allowed according to the Kosovo Agency for Accreditation. These changes were made by adding the hours of the practical part within the content of the subjects or courses. Bsc. Animal Production program is offered by the Department of Biotechnology in Animal Science, University of Pristina "Hasan Prishtina". This material provides information on the objectives aimed at achieving the practical part by the students, the procedures and regulations implemented before and during the practice, and the assessment methods. Additionally, this document provides information on the roles and responsibilities of each leadership group involved in the study process.

1.1 General description of the study program “Animal Production”

The livestock sector in Kosovo is considered one of the key sectors in the country's economic development plans. This sector has the potential to make a significant contribution to national economic growth, job creation, and poverty reduction, as well as increasing food security and population nutrition. With rising incomes and urbanization, the demand for livestock and livestock products is increasing, presenting huge opportunities for the sector. Despite the potential, the livestock production sector in Kosovo is currently characterized by low performance: poor productivity, limited market orientation, and a low level of market supply and competition. So, the Bsc. Animal production has been developed as a guide for the growth, transformation, and improvement of the sector, aimed at the development of such areas as the development of milk production by increasing its quantity and quality, meat, poultry development, animal feed production, services and improving herd health. Therefore, to effectively implement development plans, the need to have more qualified animal science professionals working in various public and private sectors is imperative. Currently, the number of students who have graduated at the bachelor level in the field of animal production in Kosovo is the lowest compared to other graduates from other disciplines in the field of agriculture. During the needs assessment study, it was observed that the manpower available in this field of qualification in various government organizations is very low. Paradoxically, a country with the potential to develop the livestock sector has a very small number of qualified labor force. The Department of Biotechnology in Animal Science has proposed the opening of the Bsc. Animal Production study program helps the government's efforts to improve the sector by increasing the number of skilled labors. Bsc. Animal Production program is committed to being internationally recognized for practice and research through academic and professional excellence. The program is research-oriented, bringing together education and experts in research and providing a wonderful student experience.

The content of the Bsc. Animal Production study program enables students to gain advanced knowledge and practices in this field, agribusiness management, and rural development, and identify and treat animal diseases. This curriculum is designed to prepare students for careers in the production, processing, and breeding of animals and their products according to scientific principles for efficient and profitable operation. The program also prepares students for careers and for the priorities of livestock development at the regional and state levels and for leadership in the management of agricultural enterprises, field servants, managers of livestock production departments in the Ministry of Agriculture, and the possibility of continuing master's and doctoral studies. The program also enables the creation of fundamental concepts for sustainable development and the solution of concrete problems in practice from the field of animal science, as well as provides an adequate basis for the possibility of continuing further studies in the field of agricultural science. There is a wide range of potential employment opportunities for graduates from the Bsc. Animal Production program. Agriculture is a global field that enables graduates of this program to contribute to many agricultural fields. Students who complete their studies in this study program will earn a bachelor's degree and can:

- Continue further education in master's programs at home and abroad.
- Employed in political and advisory roles within government departments.
- Senior positions in private companies/farms dealing with animal breeding.
- They are self-employed by creating small and medium production farms/enterprises or by creating consulting firms for this field,
- Officials are employed in the Ministry of Agriculture, Forestry and Rural Development
- Officials are employed in the Food and Veterinary Agency
- Teacher in vocational secondary schools
- Official in the Municipal Assemblies in the Directorates for Agriculture
- Inspector in municipal and republican Inspectorates,
- Customs officer
- Advisor in various agricultural associations

1.2 Rationale for improving the curriculum

Community impacts and the work associated with livestock production in Kosovo are very important because they add value to local food resources by creating jobs directly or indirectly as consumers purchase those foods. Therefore, the economic impact of livestock production will depend in part on the community's ability to meet the needs of producers or processors. Therefore, creating an education system more responsive to the needs of the labor market helps support the employability of recent graduates, minimizes the skills imbalance, and improves the resilience of the workforce to future changes in labor market demand. After discussions with the animal production business community to meet the needs for a qualified and prepared workforce in the practical aspect, it has been deemed necessary to improve the animal production curriculum by adding hours of the practical part

within the subjects so that the professional framework for this field is produced. To realize this, it is necessary to strengthen the cooperation between the Faculty of Agriculture and Veterinary Medicine and the employers. This community will help facilitate the realization of theoretical learning in practice.

The addition of practical work within the subjects as well as the addition of practical training subject is designed to prepare students for a practical career working with animals or in the livestock industry. Practical training is essential in the field of animal production because hands-on experience and training provide students with the opportunity to learn by doing and develop practical skills for real-world challenges that students experience firsthand and learn how to treat them. The internship also helps students apply the theoretical knowledge they learn in the classroom and understand the practical implications of the concepts they learn in the classroom. Students prepare for their future careers in animal production by giving them a glimpse of what to expect in the field and building professional networks, developing soft skills such as communication, teamwork, and problem-solving. Moreover, practical training in animal production education encourages students to be innovative and entrepreneurial by exposing them to new technologies, techniques, and practices. This prepares them to be agents of change and contributes to the growth and development of the animal production industry.

1.3 Goals of the adapted curriculum

In our country, employers often hire individuals based on the skills they possess and how those skills can benefit the company. But many recent graduates do not acquire practical skills specific to the demands of the labor market. Therefore, it has been deemed necessary to improve the content of the "Bsc. Animal Production" study program by integrating practice, which aims to strengthen the practical skills of students by increasing the weight of professional practice and its qualitative integration with theory. This will provide better employment opportunities for them and meet the needs of the livestock sector and skilled workers.

The main goals of the improvement of the curriculum is focused on strengthening the practical training by connecting the theoretical part with the practical part on the farm but not violating the theoretical formation required by the quality standards for the bachelor studies level. This will be achieved through:

- Integrating practical theoretical part with practical work within each module for a semester period of 15 weeks, where they can adapt to work in a work-life partnership, according to the curriculum of the study program.
- Increasing the ratio of farm/business internship hours within the course during the 3 years of study.
- Increasing students' motivation for their chosen fields by integrating classroom learning with planned and supervised practical experience.

- Adding an internship to the last semester of bachelor studies.

1.4 Structure of the improved curricula in “Animal Production”

The structure of the improved bachelor curricula in “Animal Production” is as indicated on the figure below.

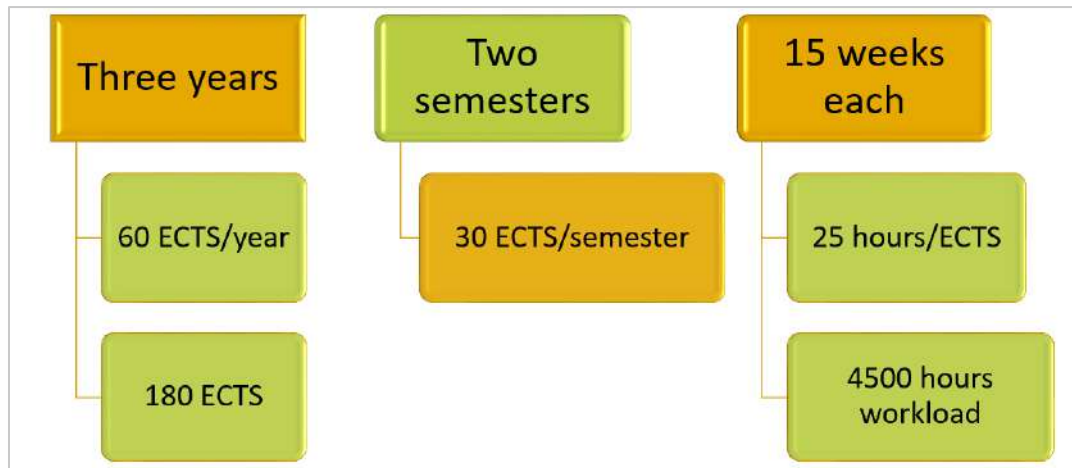


Figure 1. Structure of organized curricula

- **First Year – 11 basic modules = 60 ECTS**
- **Second Year – 10 modules**
 - 9 modules are compulsory = 54 ECTS
 - 1 module elective = 6ECTS
- **Third Year – 9 modules + diploma thesis**
 - 7 compulsory modules = 40 ECTS
 - 1 Practical/Internship = 5 ECTS
 - 2 elective modules = 12 ECTS
 - Diploma thesis = 3 ECTS

Student load (must be in accordance with Student Learning Outcomes)				Student load (must be in accordance with Student Learning Outcomes)			
Activity	Hours	Days/week	Total	Activity	Hours	Days/week	Total
Lectures	3	15	45	Lectures	2	15	30
Theory/Laboratory work/Exercises	2	15	30	Theory/Laboratory work/Exercises	2	15	30
Practical work	2	5	10	Practical work	3	5	15
Preparation for midterm test	2	4	8	Preparation for midterm test	2	4	8
Consultation with teacher	2	7	14	Consultation with teacher	2	7	14
Field work	1	3	3	Field work	1	3	3
Test, seminar paper	1	4	4	Test, seminar paper	1	4	4
Homework	1	7	7	Homework	1	7	7
Individual learning (in library or at home)	2	10	20	Individual learning (in library or at home)	2	15	30
Preparation for final exam	1	3	3	Preparation for final exam	1	3	3
Time spent in assessment (tests, quizzes, final exam)	1	4	4	Time spent in assessment (tests, quizzes, final exam)	1	4	4
Project, Presentation, ect.	1	2	2	Project, Presentation, ect.	1	2	2
Total			150	Total			150

Figure 2. The structure of student workload (same course with 6 ECTS, left side existed curricula, right side improved curricula)

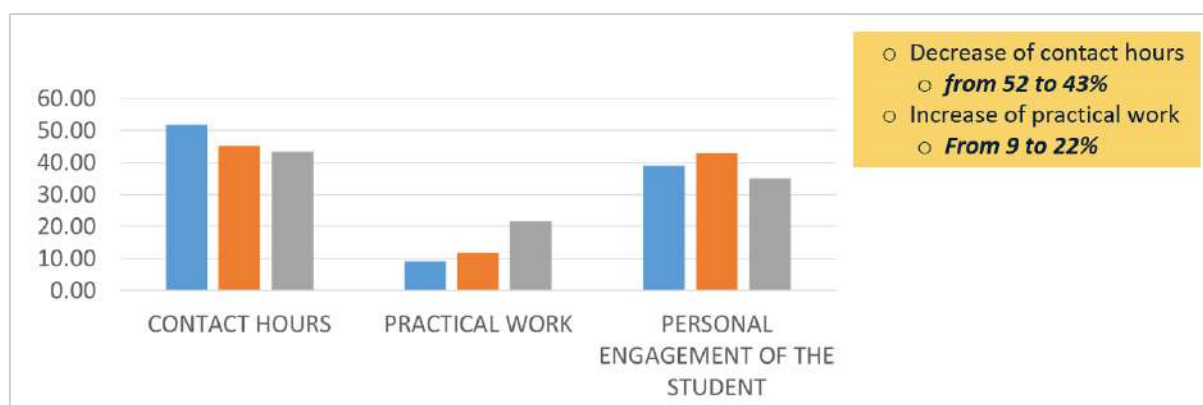


Figure 3. Distribution ration between theory and practice

1.5 Module list and workload of improved curriculum

No.	Module	Hour/week	Total hours			ECTS	Workload, =ECTS x 25 h
			Total	Lecture	Exercise		
1st Year							
Semester I (15 week)							
1	Mathematics	4	60	30	30	6	
2	Chemistry and Biochemistry	5	75	45	30	7	
3	Microbiology	4	60	30	30	6	
4	Biology of domestic animals	4	60	30	30	6	
5	Introduction to Animal Science I	3	45	30	15	5	
Total 1st semester			300	165	135	30	750
Semester II (15 week)							
6	Introduction to Animal Science II	3	45	30	15	5	

7	Applied Ethology	4	60	30	30	5	
8	Botany	4	60	30	30	5	
9	Principles of forage production	4	60	30	30	5	
10	Basics of economy	4	60	30	30	5	
11	Fundamentals of Soil Science and Fertilization	4	60	30	30	5	
Total 2nd semester			345	180	165	30	750
Total of ECTS for the 1st Year						60	1500

2nd Year							
Semester III (15 week)							
12	Basics of Biometry	4	60	30	30	5	
13	Physiology and Anatomy of Domestic Animals	4	60	30	30	5	
14	Animal Genetics	4	60	30	30	5	
15	Agricultural Mechanization	3	45	30	15	5	
16	Basics of agricultural accounting	3	45	30	15	5	
17	Plant protection	3	45	30	15	5	
Total 3rd semester			315	180	135	30	750

Semester IV (15 week)							
18	Basics of animal nutrition	4	60	30	30	6	
19	Feeds and Feed Conservation	4	60	30	30	6	
20	Ecology and Environmental Protection in Agriculture	4	60	30	30	6	
21	Quantitative Genetics and Introduction to Selective Breeding	4	60	30	30	6	
22	Elective Subject	4	60	30	30	6	
Total 4th semester			300	150	150	30	750
Total of ECTS for the 2nd Year						60	1500

3rd Year							
Semester V (15 week)							
23	Cattle Production	4	60	30	30	6	
24	Pig Production	4	60	30	30	6	
25	Poultry Production	4	60	30	30	6	
26	Small Ruminants Production	4	60	30	30	6	
27	Animal Hygiene	4	60	30	30	6	
Total of 5th semester		20	300	150	150	30	750
Semester VI (15 week)							
28	Agricultural Policy and Law	4	60	30	30	5	
29	Introduction to Farm Business Management	4	60	30	30	5	
30	Internship/Practical Training	6	90	0	90	5	
31	Elective Subject	4	60	30	30	12	

32	Diploma project					3	
Total of 6th semester				60	150	30	750
Total of ECTS for the 3rd Year						60	1500

Elective subject							
1	Information and Documentation in Animal Sciences	4	60	30	30	6	
2	Agriculture Marketing	4	60	30	30	6	
3	Applied informatics in Agriculture	4	60	30	30	6	
4	Mechanization for Harvesting and Processing of Animal Feed	4	60	30	30	6	
5	Processing of Animal Products	4	60	30	30	6	
6	Rabbit Production	4	60	30	30	6	
7	Husbandry of Alternative Poultry Species	4	60	30	30	6	
8	Beekeeping	4	60	30	30	6	
9	Laboratory Animal Science	4	60	30	30	6	
10	Horse Breeding and Nutrition	4	60	30	30	6	
11	Companion Animals	4	60	30	30	6	
12	Wildlife Nutrition and Feeding	4	60	30	30	6	
13	Carcass Evaluation and Grading	4	60	30	30	6	
14	Environmental Aspects of Animal Breeding	4	60	30	30	6	
15	Rural Development and Sustainable Agriculture	4	60	30	30	6	
16	Pets Nutrition	4	60	30	30	6	
17	Foreign Language	4	60	30	30	6	

Figure 4 and 5 presents the detailed structure of the student's workload in the first year of studies.

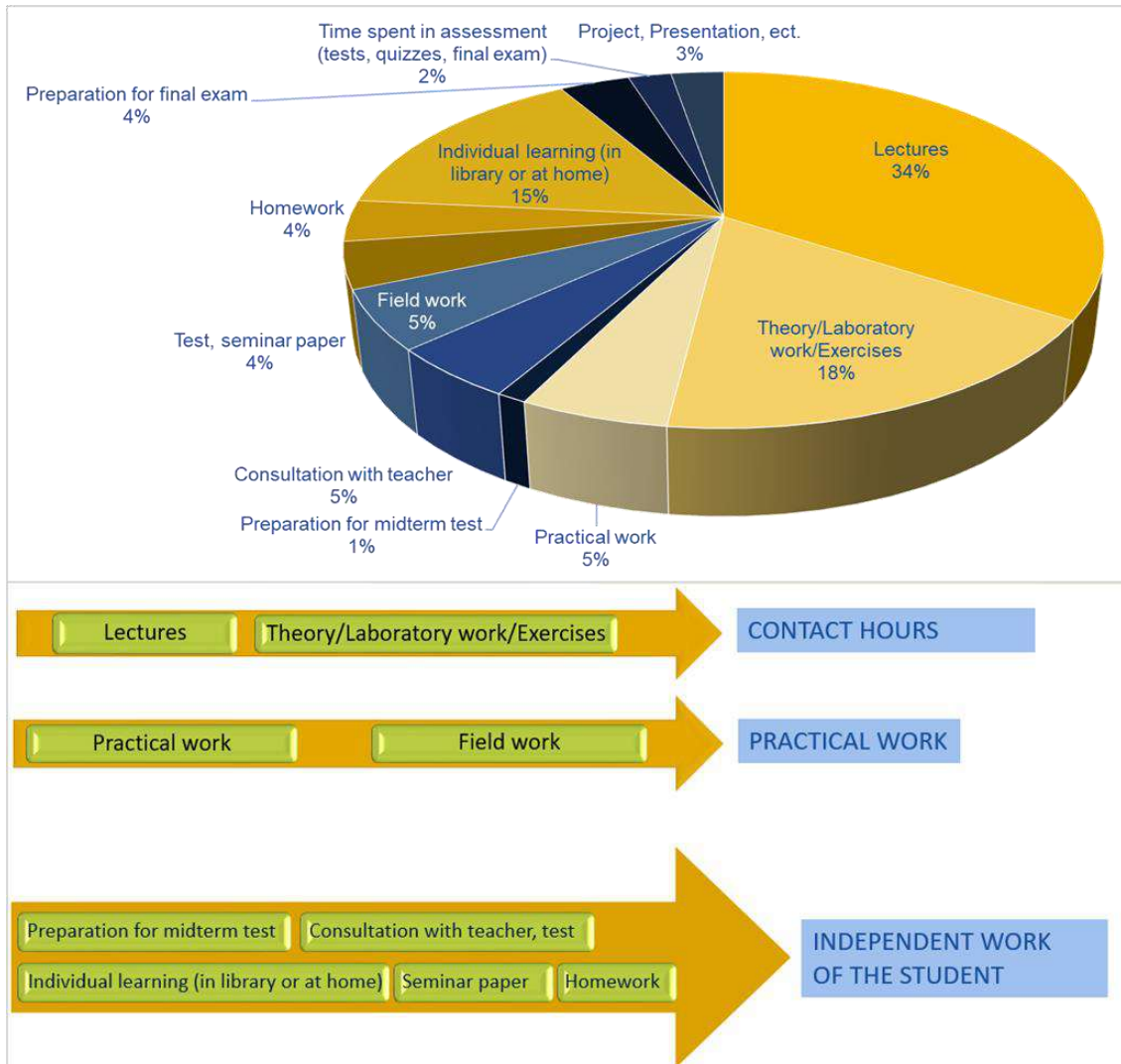


Figure 4. Detailed structure of student workload – First Year

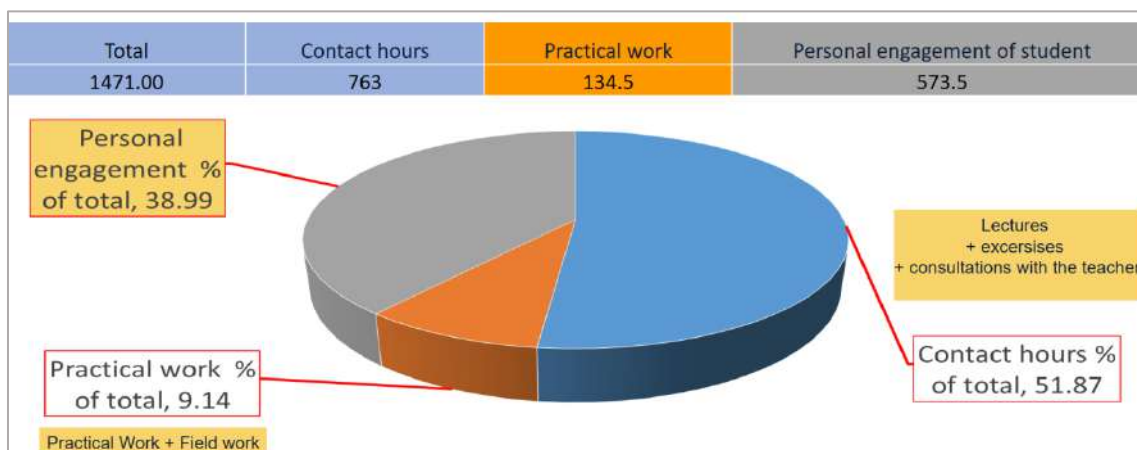


Figure 5. Pooled structure of student workload – First Year

Figure 6 and 7 presents the detailed structure of the student's workload in the second year of studies.

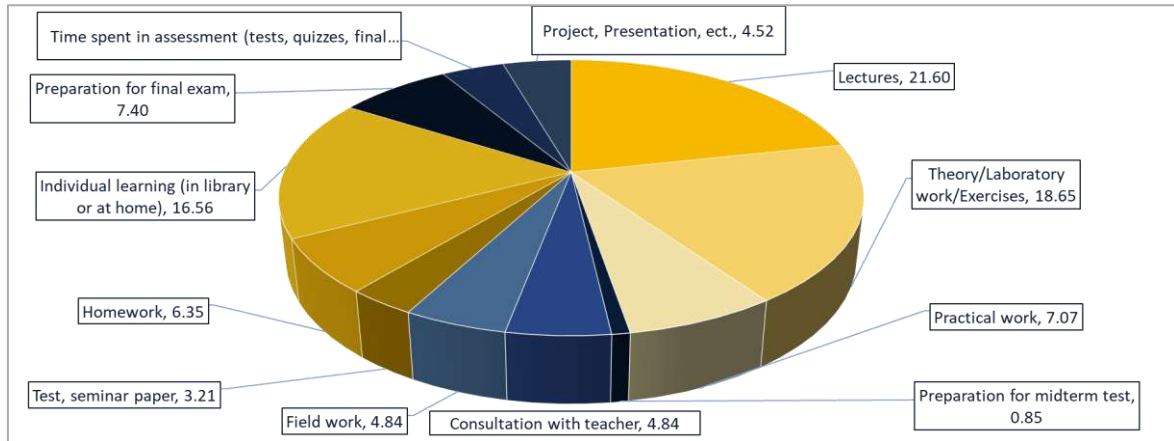


Figure 6. Detailed structure of student workload – Second year

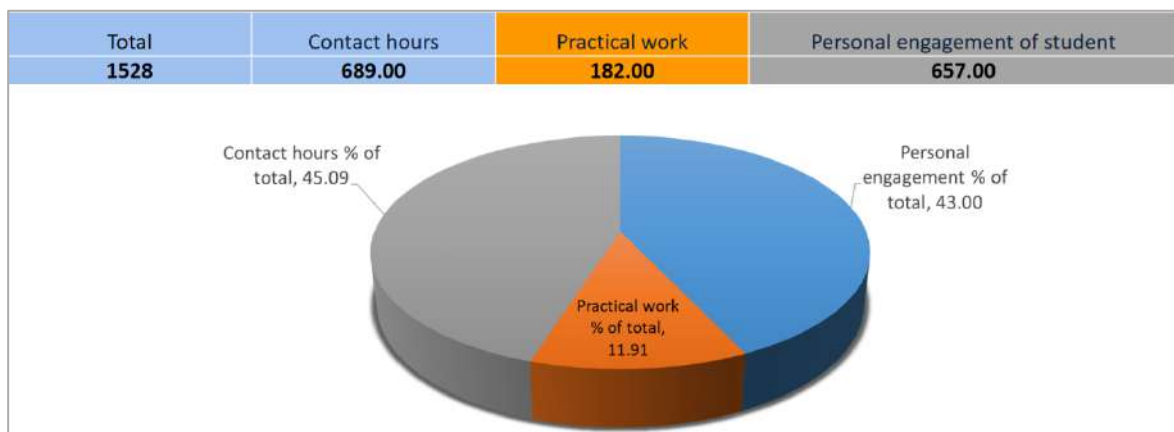


Figure 7. Pooled structure of student workload – Second year

Figure 8 and 9 presents the detailed structure of the student's workload in the second year of studies.

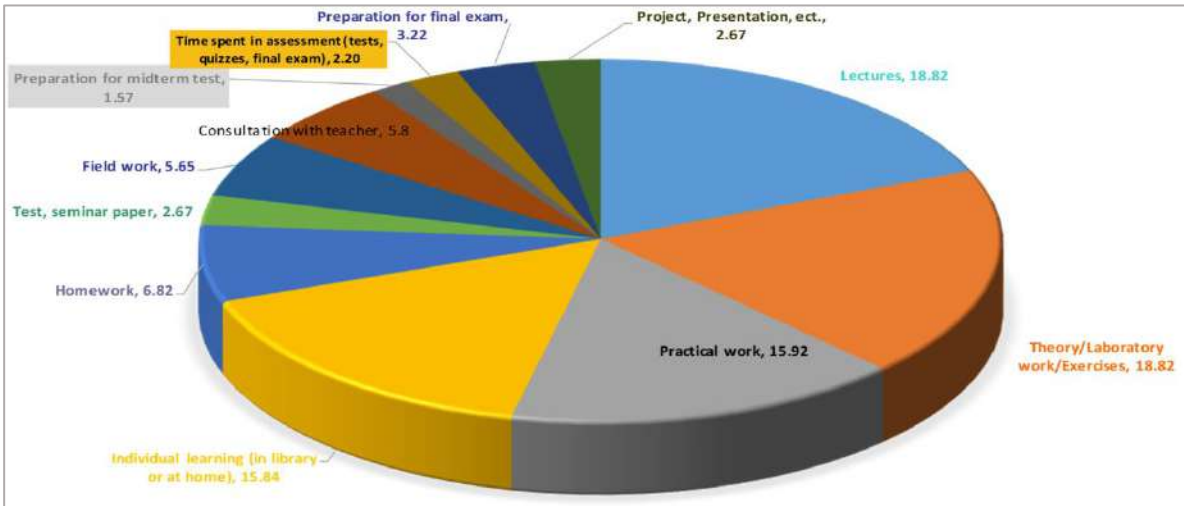


Figure 8. Detailed structure of student workload – Third year

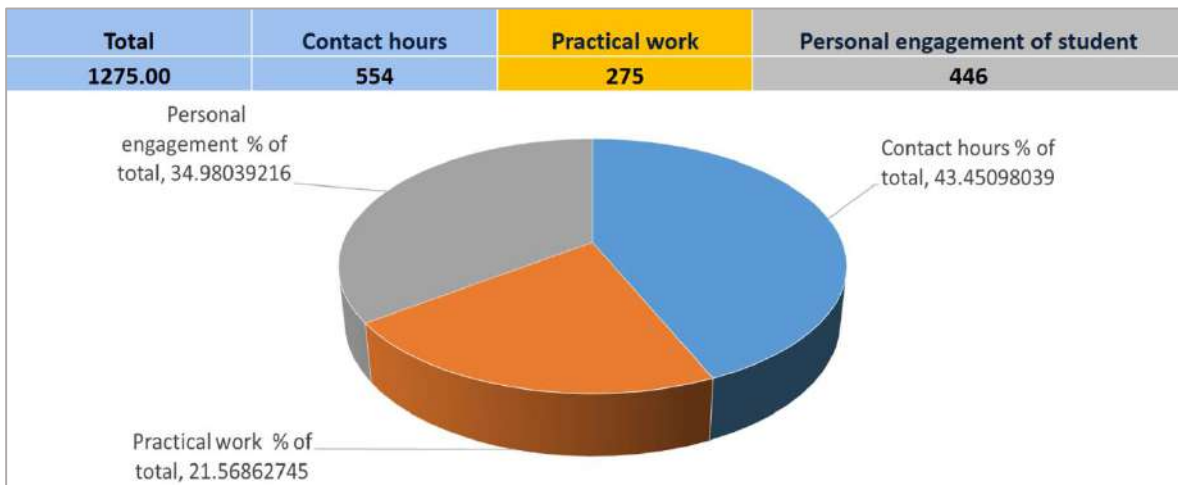


Figure 9. Pooled structure of student workload – Third year

Summary of the study program Bsc. Animal Production is shown in figure 10.

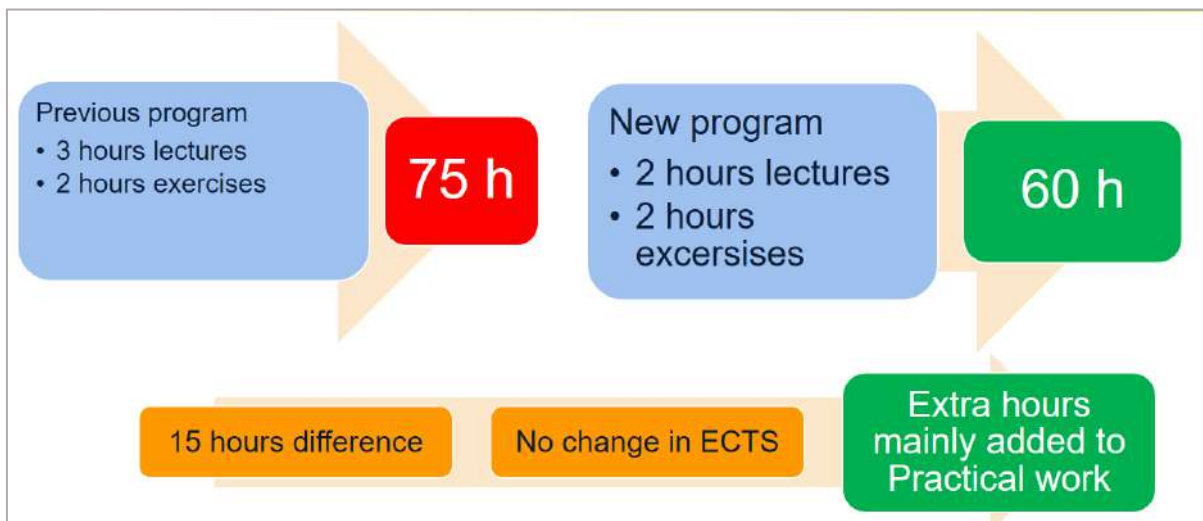


Figure 10. summary of study program Bsc. Animal Production

1.6 Description of changes in the improved curricula “Animal Production”

Within the framework of the DualAFS project, it is aimed to improve the existing bachelor studies curriculum by adding practical work within each module, and this within the limits allowed for change up to 15%, according to the regulation of the Kosovo Agency for accreditation/reaccreditation. The Department of Biotechnology in Animal Science has made this improvement/change to align with the practice according to the "Dual" model.

The changes to improve the existing curriculum were made within the framework of the Accreditation Standards of the Kosovo Accreditation Agency.

Considering the objectives of the international project on "Dual Curricula – Study and Work Practice in Agriculture and Food Safety" within the Erasmus + program, where UPHP (study program "Bsc. Animal production") is a partner, the Department of Biotechnology in Animal Science has applied the following changes according to the relevant semesters:

1st SEMESTER

- In each course (5 courses) of this semester in each course of this semester, 15 hours of lectures in the auditorium have been replaced by practical work and independent student work.

2nd SEMESTER

- In this semester the course “Fundamentals of Soil Science and Fertilization” from five courses, have been made 6 courses (each of them with 5 ECTS). Changes have also been made to the replacement of lecture hours (from 45 to 30 hours) and this difference (15 hours) has been distributed in the increase of practical work and the student's independent work from 20 to 30 hours.

3rd SEMESTER

- The subject "Plant Protection" has been added. From 5 courses with 6 ECTS have been made 6 courses with 5 ECTS. Even in this semester, 45 hours (about 2 days) of lectures in the auditorium have been reduced to 30 hours and the difference in hours has been distributed to practical work and independent student work.

4th SEMESTER

- Also in this semester, the number of lectures for each subject has been reduced from 45 to 30 hours and the change in these hours (15 hours) has been distributed in practical work (from 10 to 15 hours) and independent student work (from 20 to 30 hours).

5th SEMESTER

- The changes of this semester and the sixth semester are summarized in figure 8 and 9.

6th SEMESTER

- In this semester, the Practical training/Internship course takes place for 15 weeks of practical work.

1.7 Competences and skills of the curriculum

The graduated students in the Animal Production study program, will acquire a set of competencies:

- a) Increasing student skills for modern field research methods;
- b) Ability to conduct independent research of theoretical and practical problems with the aim of finding innovative or improved solutions and their implementation;
- c) Training to work in teams and establish professional communication in order to contribute to the development of science and profession;
- d) Capacity for critical analysis and integration of knowledge gained in interdisciplinary modules.
- e) The ability to transfer knowledge and ideas to colleagues and the broader academic community and society as a whole;
- f) The ability to promote technological and social progress in their professional environment.

1.8 Employment possibilities of “Animal Production” graduates

Students who complete studies in this study program will earn a Bachelor's Degree and can be employed as:

- Manager in private company’s/farms company dealing with animal breeding
- Self-employed in the creation of small/medium-sized farms/enterprises or by setting up advisory firms in this field,
- Officer in the Ministry of Agriculture, Forestry and Rural Development
- An officer at the Food and Veterinary Agency
- Teacher at the Vocational High School
- An officer at Municipal Assemblies at Directorates of Agriculture
- Inspector of the Municipal Inspectorate and of the Republic,
- Customs officer
- Counsellor of various agricultural associations

1.9 Admission criteria to the study program and tuition fees

The admission of students to this study program is done according to the predetermined quotas proposed by the Animal Production Department and approved by the Senate of University of Prishtina. In this study program may enroll Kosovar citizens, and others outside the state borders, as well as foreign citizens, that comply with the criteria defined by the Ministry of Education Science and Technology.

Candidates who meet the following criteria have the right to apply on the "Bachelor" program in "Animal Production":

- For college enrollment, students must have a high school diploma or other equivalent study documents which they receive after they have successfully completed the mature exam successfully determined by MEST.

The candidate is required to submit in person the following documentation:

- a) Birth extract (original), not older than 6 months
- b) Transcripts of all high school grades (originals, duplicates or notarized)
- c) High school diploma (original, duplicate or notarized).
- d) Matura certificate, if there was a mature exam (original, duplicate or notarized).
- e) Copy of the identification document & two personal photos
- f) The completed application form which is generated during the online application from the Internet
- g) Certificate of recognition of the education abroad. The list of pre-university institutions licensed in the country is provided by MEST from the Central Administration of the University of Pristina.

The candidates of this study program must have completed the pre-university cycle in the following fields:

- General Education;
- "Agribusiness" Professional School;
- "Economic" Vocational School;
- "Agricultural" Professional School;
- "Business Administration" Professional School;

The criteria, quotas, fees and modalities of admission to this study program are proposed by the University of Prishtina, in accordance with state quality standards, approved by the Senate of UP.

Currently, the annual study fee is based on the Decision of the Council of Ministers.

1.10 Work-based learning and practical training

Professional practice/internship is one of the most important components of the curriculum in Bsc. Animal Production. To enable students to apply in practice, the theoretical knowledge they have acquired in the auditorium. For this purpose, it is intended that professional practice/internship be developed in those entities that have close ties with the faculty-department. The objective of the work-based placement and practical learning experience, that is offered by this study program, it is mainly referred to the consolidation of the knowledge and skills obtained by students during theoretical classes and by integrating them with the practical experience that they will be able to gain during their studies.

1.10.1 Partners for practice implementation

a) *Our partners for the implementation of practical placement of students are:*

- Medium and large farms involved in the sector of agriculture and livestock;
- Agri-business operators (on farm and off farm activities)
- Agro-tourism units
- Production companies
- Companies that operate in the food processing sector
- Companies that collect, storage and evaluate agriculture products and medicinal herbs
- Non-governmental organization involved into different projects
- Financial institutions
- Central and local public institutions (municipality, agency of agriculture extension, etc)

b) Selection of stakeholders for practical part

The stakeholders (companies, farms, agribusiness unions), who are involved in the completion of the practical placement and internships of students, is based on the agreements signed by the Faculty of Agriculture and Veterinary Medicine and the Department of Biotechnology of Animal Science with them. The primary focus is to strengthen cooperation with stakeholders all over the country. This will enable students to complete their practical placement near to their homes and provide lower transportation costs. With this regard, students are free to choose where they wish to perform their placement. In addition, this will be facilitated due to the cooperation agreements that Faculty of Agriculture has with different work life partners.

The stakeholders have the right to interview and select the students, prior to their acceptance for the completion of the practical placement. In the cases when a student family possesses an agriculture farm, company or business, he/she is allowed to complete the practical part of the curricula on his/her own farm or business.

1.10.2 Goals of the practical placement

During their practical placement, students will have the opportunity to get work experience, practice critical thinking, solve real problems, develop new skills, and interact with professionals in the above entities. The student is trained in how to deal with problems in real life, manage his tasks, identify objectives, meet obligations, explore new ideas, study practical aspects, and make decisions.

At the end of the internship, the teacher evaluates the student, based on the evaluation report of the subject where the internship was performed, which affects the evaluation of the validity of the internship in cooperation with the commission for the evaluation of professional practice. In addition, they will be able to analyze what they have learned by preparing final reports and projects.

1.10.2.1 Biotechnology Animal Science Department responsibilities for organization professional practice/internship

For the organization and functioning of professional practice/internship the department:

- Compiles the list of students who will complete the professional internship
- At the beginning of the academic year, informs students about the obligation of professional practice/internship, as well as about the opportunities and entities which offer to students' internships, not excluding the individual selection of students, when they are following with the legal framework (Bologna Process).
- Prepares the internship program and how the process will be monitored by the staff of the BASD.

1.10.2.2 Professional practice teacher/supervisor

- Coordinates with the student the program's implementation, changes in the development of practice/internship within the allowed limits. It also helps and guarantees that the practice is carried out in the right way
- Plans and coordinates with the subject, the development of practice, according to the program.
- At the end of the internship, the lecturer evaluates the student, based on the evaluation report of the subject where the internship was performed, which affects the evaluation of the validity of the internship in cooperation with the commission for the evaluation of professional practice.

1.10.2.3 Students' responsibilities

The student must:

- Know the rules and program of professional practice/internship and supporting documents before starting the internship.
- Establish and maintain correct relationships based on good practices and mutual respect with the business where the internship is conducted, colleagues, and other staff members.
- To make maximum efforts to gain technical and practical knowledge that will serve in vocational training.

1.10.2.4 Student rights

During the internship the student:

- Selects the subject individually, or according to the list provided by the department.
- Participates actively in activities of theoretical and practical interest
- Appeals to the subject, as well as to the leading professor of practice/internship for actions that conflict with his rights, or with any other action that creates difficulties or impossibilities for the development of practice/internship.
- The student can change the entity only after the approval of the responsible lecturer and the department.

1.10.2.5 Role of the entity (business) where the student will perform the professional practice/internship

Entities (businesses) help the student to successfully complete the professional internship by:

- Develop the practical skills of the student through observation, counseling, recommendations, and comments with the aim of his professional formation.

- Provide opportunities for the student to perform services and activities performed by the subject himself.
- Assign the student to increase his/her professional knowledge and skills.
- Continuously follow the student according to the rules set out in this regulation.
- Encourage the student to achieve high levels of performance.

1.10.3 Forms of practical placement

While performing the internship, the student is obliged to prepare the report of the internship with knowledge and information gained during it. In the report, the student must present the internship's purpose, the arguments that will be the basis of the internship. At the end of the internship, the student submits the report, as well as the evaluation or opinion of the manager of the entity where the internship was conducted.

1.10.3.1 Report format

The report must be presented in book form. The logo of the University of Prishtina "Hasan Prishtina" is placed on the top of the cover and below it is written the name of the University of Prishtina "Hasan Prishtina", the Faculty of Agriculture and Veterinary Medicine and the Department of Biotechnology in Animal Science. Also, on the cover is placed the name of the entity (business) where the internship was performed, the title of the topic, the name of the student, as well as the month and year of the internship.

- Type of writing according to levels:
 - o Main Title or Chapter Title: Times New Roman; Bold; 16, all capital; hanging 0.3; space before and after it 12;
 - o First level: Times New Roman; Bold; 14; Small capital, hanging 0.4; space before and after it 6;
 - o Second level: Times New Roman; Bold; 14; hanging 0.5; space before and after it 6.
 - o Level three: Times New Roman; Bold and italic; 14; hanging 0.6; space before and after it 6; Thesis pages should be formatted as follows
- The margins for the whole text will be:
 - o Upper margin 1"
 - o Lower margin 1 "
 - o Left margin 1.25 "
 - o Right margin 1.25 "
- All page numbers should be placed below and in the middle of the page;
- Notes should be made in writing Times New Roman, 12, single space;
- Tables to be included in the text. Tables should be placed in the center of the page, – within certain margins. A reference number should be placed in each table that should follow the chapter number to which it belongs. The word "Table", the table number and the legend should be placed at the top of the table. Writing should be

Times New Roman, 12, bold. If the table continues the next page the legend is not repeated. If a table contains citations references should be noted.

- Illustrations and diagrams should be scanned and incorporated into the electronic version of the document. The word "Figure", the number of the diagram that follows the number of the chapter to which it belongs and the legend, should be placed below the diagram or figure. Writing should be Times New Roman, 12, bold;

1.10.4 Evaluation of the professional practice/internship report

During their practice students will be assessed according to their continuous performance. The elements of their evaluation will be as provided in the figure below. The conclusion of the professional practice/internship is done through an oral presentation, in front of a commission of 3 members. The presentation is individual or group, depending on how the practice is conducted professionally. The student is evaluated with a grade based on the work done in the relevant subject, the report submitted, as well as the final presentation before the committee.

GUIDE FOR THE DEVELOPMENT OF PROFESSIONAL PRACTICE/INTERNSHIP



UNIVERSITY OF PRISHTINA "HASAN PRISHTINA"
FACULTY OF AGRICULTURE AND VETERINARY
DEPARTMENT OF BIOTECHNOLOGY IN ZOOTEKNI

Report

For nearby professional practice

“ _____ ”

Study program

Bachelor “Animal Production”

Topic title:

“ _____ ”

Prepared:

Name and Surname of the student

GUIDE FOR THE DEVELOPMENT OF PROFESSIONAL PRACTICE/INTERNSHIP

Name of the student _____

Rubric for the evaluation of internship work		
Total points: 100		
Objective: Discuss your learning experiences throughout the practice. Provide details about any changes in career choices you have made after completing this practice.		
<u>Rated parts</u>	Possible points	Points earned
Spelling	5	
Grammar	5	
Site title	2	
Title of internship		
Name of Supervisor (Mentor) & Company Name (Associate)		
The place where the internship took place		
Name of the program and year of study when the internship was completed		
Internship dates, internship registration semester, no. of ECTS and internship hours		
Introduction	15	
Describe why you chose this practice/internship		
Describe the expectations before starting the internship		
Describe the practice/internship in general terms (should include, objectives and day-to-day responsibilities)		
Learning Experiences and Intellectual Development	48	
Description (in detail) of three specific learning experiences		
Was the collaborator interested in your development? Describe your interaction with your co-worker and your co-workers		
What courses (subjects) have you attended (taught), if any, that have helped you throughout this internship? How did they help you?		
Did the internship experience change your perspective or approach to your education (course, inclusion, etc.) at xxxxxx? Explain.		
Career path	15	
What were your career plans before this internship?		
Describe how your career plans may have changed.		
Are you more satisfied with your future career plans now that you have completed this internship? If so, Explain the change in your thinking throughout the practice/internship		
Annexes (here you do not need to focus on the minimum page length)	10	
Include CV and cover letter delivered to associate (business)		
Include any material that has been needed to carry out the internship		
Total	100	

GUIDE FOR THE DEVELOPMENT OF PROFESSIONAL PRACTICE/INTERNSHIP

Video rating section		
Total points: 100		
Objective: Produce a promotional video that will provide a complete overview for prospective students interested in applying and completing the internship.		
<u>Rated parts</u>	Possible points	Points earned
Duration = 5 – 10 minutes	10	
The video has been uploaded to YouTube	5	
The video is creatively sketched and designed	20	
The video includes the student describing the practice in general terms	15	
Explain that the practice/internship met or exceeded expectations?	5	
Describe the positive features (attributes) of the practice/internship	5	
Describe the negative traits (attributes) of the practice/internship	5	
Would you recommend this practice/internship to others? Why or why not?	5	
The video included an interview with the collaborator	10	
The video included interviews with colleagues	10	
The video shows the accommodation and the practice environment	10	
Total	100	

During their practical placement students are required to prepare different assignments in order for the project or practical placement to be completed. The assignments that students have to complete are according to each form of practice foreseen in the curricula of Animal Production, as provided in the paragraph below.

1.10.4.1 Description of the project work

The steps that students should follow when performing a project work are as defined below:

- Identification of the problem & project topic
- Development of objectives or hypothesis
- Data collection
- Data analysis
- Development of conclusions
- Recommendations

1.10.5 Bachelor Project thesis

The subject of the diploma is planned in the last semester of the study program. To start the thesis, students must have passed all exams of all semesters and completed the professional practice. The subject is intended to help students acquire in-depth knowledge and competences that are described in the intended learning outcomes of the study program. During the bachelor's thesis, students are expected to provide an individual project which may have a research focus or collaborate with a company, farm or public institution, and provide project results for them. The topic of the thesis can foresee simple research elements (e.g., monitoring of production indicators, reproduction, evaluation of feeds and rations, etc.) they should be within the content of the dual practice program, which means that for the student does not need additional work on the farm. The thesis is presented at the end of July or the defense can be done no further than twice the bachelor's studies.

The bachelor's thesis includes:

- The request together with the justification of the project proposal
- Certificate of student status
- Transcript of grades
- The purpose of the research
- The material and study methods used for the realization of the thesis
- Research results or findings during work for the realization of the thesis
- Conclusions
- Recommendations

For the defense of the bachelor thesis, the student prepares the PPT version and the duration of the defense can be 15-20 min. The degree defense takes place before the commission proposed by the department and appointed by the dean.

2 PRACTICE MODULE CONTENT

Prepared by: Prof. Asoc. Dr. Alltane Kryeziu and Prof. Dr. Muhamet Kamberi

2.1 FEEDS AND FEED CONSERVATION

Prepared by Prof. Dr. Muhamet Kamberi

Lecturer: Prof. Dr. Muhamet Kamberi, Alltane Kryeziu	
Workload: 5 ECTS	
Semester:	
Type:	
Study Program: Bsc. Animal Production	
Code:	
Lecture`s email: muhamet.kamberi@uni-pr.edu , alltane.kryeziu@uni-pr.edu	
Summary and learning outcomes	
Aim:	
Students acquire the necessary practical knowledge and skills as a farmer or professionals in feed and feeding on livestock farms, as well as knowledge of feeding techniques that affect the quality of animal products.	
Objectives of the module:	
Students gain basic practical knowledge in the following areas of feed science and the feeding of farm animals:	
<ul style="list-style-type: none">• Assessment of the production capacities of the livestock farm for the production of the on-farm feed and the agro technical processes used on the farm.• Feed conservation and preparation on farm.• Practical assessment of the quality and safety of feed on the animal farm.• Formulation and optimization of feed rations for the animal species and categories kept on the farm and calculation of feed requirements for different periods (monthly, annually) on the practice farm.• Feeding technique and technology, which are planned and applied in the practical operation.• Evaluation of the quality of the livestock primary products produced on the farm in relation to applied feeding.• Evaluation of alimentary diseases and disorders in the farm in relation to the feeding system.	

Topics of practical training

Topics are related to the theoretical part of the module. The most important topics are explained in detail so that they can be understood not only by the students but also by the supervisors in the farm/company/businesses:

- On-farm forage and concentrate production and market-purchased feeds;
- On-field forage and concentrate quality assessment and sample preparation;
- Technology of Forage conservation – silages, hay;
- Silage and hay quality evaluation;
- Ration formulation on different animal species on livestock farm;
- Feeding techniques and technologies for different animal species on livestock farm;
- Optimization of feeding;
- Feeding controlling;
- Alimentary (digestive and metabolic) related health disorders;
- Farm nutrient balance, esp. CH₄, N, P, K;
- Evaluation of feeds and feeding costs.

Concrete situations/examples/case study from the farm/company/business

Concrete situations/examples/case study from the farm/company where the student has carried out the practice, related to the contents of the practical training of the relevant module. A precise timetable for the work/solution of each situation/example should be in place.

I	Assessment of the production capacities of the livestock farm for the production of the on-farm feed (3 practice days or 18 hour)
II	Feed conservation and preparation on farm, assessment of feed quality (3 practice days or 18 hours)
III	Formulation and optimization of feed rations for the animal species and categories kept on the farm and calculation of feed requirements for different periods (monthly, annually) on the practice farm. Feeding technique and technology, which are planned and applied in the practical operation. E.g., dairy farms, beef cattle farm; pig farm; (5 practice days or 30 hours)
IV	Evaluation of the quality of the livestock primary products produced on the farm in relation to applied feeding. (2 practice days or 12 hrs)
V	Evaluation of alimentary diseases and disorders in the farm in relation to the feeding system. (2 practice days or 12 hrs)

Learning methods: The methods of work-based learning must be described.

Results/outcomes of the on-farm/company practice

Based on:

- **Written practice report – Report**

- PPT presentations
- Project Work

Guideline for Project Work, if elected in the respective module

All elements of the project work should be explained in detail, i.e. aim/justification, research question, hypothesis, methods of carrying out the project work and working with the responsible lecturer and supervisor in the farm/company, results and discussion, conclusions and presentation of the work and evaluation.

Evaluation/assessment methods of practical part, based on:

- Written practice report (70%)
- PPT presentations (30%)

Project Work:

- Written report (70%)
- PPT presentations (30%)

Appendices: e.g., templates for the implementation of the objectives, elaboration of situations/examples/case study from the farm/company and for the elaboration of the project work, if it has been chosen in the respective module.

2.2 INTRODUCTION TO ANIMAL BREEDING

Prepared by Prof. Ass. Dr. Fatos Krasniqi

Lecturer: Prof. Ass. Dr. Fatos Krasniqi	
Workload: 5 ECTS Semester: I & II Type: Compulsory Study Program: Bsc. Animal Production Code: Lecture`s email: fatos.krasniqi@uni-pr.edu	
Summary and learning outcomes Aim: Genetic improvement refers to the theory, techniques, and practices of identifying breeding offspring animals with the highest genetic potential for superior breeding and selected matings that result in herd genetic variation. Objectives of the module: <ul style="list-style-type: none">– After completing this practical, students will be able to:– To monitor and analyze the dynamics of the growth of the breeding offspring animals in the farm. To offer the solutions if the standards of growth of offspring animal is not achieved;– To carry out the selection of high capacity offspring animals of generation for farm animal herd rotation;– To keep production records and the herd book;– To use the methods of evaluating the breed value of animals, based on individual performance, pedigree;– To interpret the data of bulls records used for artificial insemination in livestock farms;– To draw up the mating plan for reproduction animals according to the production direction of the farm (eg milk beef etc.);– To understand and to draw pairing plan for industrial cross -breed and poure-breed according to the market requests.	
Topics of practical training Topics are related to the theoretical part of the module. The most important points are explained in detail so that they can be understood not only by the students but also by the supervisors in the company. <ul style="list-style-type: none">– Methods of selection, selection of quantitative traits;– Linear evaluation of farm animals;– Prediction of breed value based on individual performance;	

<ul style="list-style-type: none"> – Prediction of breed value based on pedigree; – Prediction of breed value based on collateral relatives; – Prediction of breed value based on offspring test; – To draw up the mating plan for farm breed animals according to the production goal of the farm; quantity and quality of milk, body weight, body constitution, milking ability, fertility . 	
<p>Concrete situations/examples/case study from the farm/company/business</p> <p><i>Concrete situations/examples/case study from the farm/company where the student has carried out the practice, related to the contents of the practical training of the relevant module. A precise timetable for the work/solution of each situation/example should be in place.</i></p>	
I	<p>Methods of selection, selection of quantitative traits. Linear evaluation of farm animals (1 practice days or 6 hour)</p>
II	<p>Prediction of breed value based on individual performance, pedigree, collateral relatives and offspring test (2 practice days or 12 hours)</p>
III	<p>Draw up of the mating plan for farm animals according to the production goal of the farm; quantity and quality of milk, body weight, body constitution, milking ability, fertility (4 practice days or 24 hours)</p>
<p>Learning methods: The methods of work-based learning must be described.</p>	
<p>Results/outcomes of the on-farm/company practice</p> <p>Based on:</p> <ul style="list-style-type: none"> – Written practice report – Report – PPT presentations – Project Work 	
<p>Guideline for Project Work, if elected in the respective module</p> <p>All elements of the project work should be explained in detail, i.e. aim/justification, research question, hypothesis, methods of carrying out the project work and working with the responsible lecturer and supervisor in the farm/company, results and discussion, conclusions and presentation of the work and evaluation.</p>	
<p>Evaluation/assessment methods of practical part, based on:</p> <ul style="list-style-type: none"> – Written practice report (70%) – PPT presentations (30%) <p>Project Work:</p> <ul style="list-style-type: none"> – Written report (70%) – PPT presentations (30%) 	
<p>Appendices: e.g., templates for the implementation of the objectives, elaboration of</p>	

situations/examples/case study from the farm/company and for the elaboration of the project work, if it has been chosen in the respective module.

2.3 ANIMAL HEALTH MANAGEMENT

Prepared by Prof. Dr. Skender Muji

Lecturer: Prof. Dr. Skender Muji	
Workload: 5 ECTS	
Semester:	
Type: Elective	
Study Program: Msc. Applied Animal Science	
Code:	
Lecture`s email: skender.muji@uni-pr.edu	
Summary and learning outcomes	
Aim:	
Students acquire the necessary practical knowledge and skills as a farmer or professionals or specialist on the Animal Health on the farm.	
Objectives of the module:	
Students gain basic practical knowledge in the following areas of Animal Health of animal farm:	
<ul style="list-style-type: none">• Veterinary assistance in farm animals.• Assessment of the health situation of animals in farms.• Main diseases in the farm (zoonotic diseases and non-zoonotic disease)• Impact of main diseases of farm animals on production (quantity and quality) and cost of production	
Topics of practical training	
Topics are related to the theoretical part of the module. The most important points are explained in detail so that they can be understood not only by the students but also by the supervisors in the company.	
<ul style="list-style-type: none">– Healthy farm animals and behavior, contacts with animal, fixing and care to protect worker;– How to offer veterinary assistance for animals on the farm;– Knowing with main non -zoonotic diseases on the farm;– How to control situation of the main non zoonotic disease (diagnoses, specific prophylaxis, treatment;– Main zoonotic diseases on the farm;– How to control situation of the zoonotic disease, (diagnoses, specific prophylaxis, health protection of workers and consumer;– Main disorders of hooves, udders, prophylaxis und treatment.– Evaluation of economic losses from diseases in farms (production, reproduction, costs of production quantity and quality).	
Concrete situations/examples/case study from the farm/company/business	
<i>Concrete situations/examples/case study from the farm/company where the student has carried</i>	

<p><i>out the practice, related to the contents of the practical training of the relevant module. A precise timetable for the work/solution of each situation/example should be in place.</i></p>	
I	<p>Healthy farm animals and behavior, contacts with animal, fixing and care to protect worker) (3 practice days or 18 hour)</p>
II	<p>How to offer veterinary assistance for animals on the farm. (3 practice days or 18 hours)</p>
III	<ul style="list-style-type: none"> – Knowing with main non -zoonotic diseases on the farm; – How to control situation of the non- zoonotic disease (diagnoses, specific prophylaxis, treatment) – Main disorder of hooves, udders, prophylaxis und treatment. E.g., dairy farms, beef cattle farm; pig farm; <p>(10 practice days or 60 hours)</p>
IV	<ul style="list-style-type: none"> – Main zoonotic diseases on the farm. – How to control situation of the zoonotic disease, (diagnoses, specific prophylaxis, health protection of workers and consumer <p>(2 practice days or 12 hrs)</p>
V	<ul style="list-style-type: none"> – Assessment of situation of animal health on the farm. – Evaluation of economic losses from diseases in farms (production, reproduction, costs of production quantity and quality <p>(2 practice days or 12 hrs)</p>
<p>Learning methods: The methods of work-based learning must be described.</p>	
<p>Results/outcomes of the on-farm/company practice</p> <p>Based on:</p> <ul style="list-style-type: none"> – Written practice report – Report – PPT presentations – Project Work 	
<p>Guideline for Project Work, if elected in the respective module</p> <p>All elements of the project work should be explained in detail, i.e. aim/justification, research question, hypothesis, methods of carrying out the project work and working with the responsible lecturer and supervisor in the farm/company, results and discussion, conclusions and presentation of the work and evaluation.</p>	
<p>Evaluation/assessment methods of practical part, based on:</p> <ul style="list-style-type: none"> – Written practice report (70%) – PPT presentations (30%) <p>Project Work:</p> <ul style="list-style-type: none"> – Written report (70%) – PPT presentations (30%) 	
<p>Appendices: e.g., templates for the implementation of the objectives, elaboration of situations/examples/case study from the farm/company and for the elaboration of the project work, if it has been chosen in the respective module.</p>	

2.4 ANIMAL HYGIENE

Prepared by Prof. Dr. Skender Muji

Lecturer: Prof. Dr. Skender Muji	
Workload: 6 ECTS Semester: V Type: Compulsory Study Program: Bsc. Animal Hygiene Code: Lecture`s email: skender.muji@uni-pr.edu	
Summary and learning outcomes Aim: Students acquire the necessary practical knowledge and skills as a farmer or professionals on the Animal Hygiene of the farms, as well as knowledge on assessment standards of welfare in farms. Objectives of the module: Students gain basic practical knowledge in the following areas of Animal Hygiene on animal`s farm: <ul style="list-style-type: none">– Assessment environment status in stable, air, gasses, light, microorganisms.– Assessment of water hygiene on the farm.– Hygiene and prophylaxis measures in the livestock farms. Disinfectant etc– Microbiological control of environment of animal houses.– Manure management in animal farms.– Assessment of pollution factors in farms and its impact on the environment (soil, water etc)– Assessment of standard of animal welfare in the farm and during transport.	
Topics of practical training Topics are related to the theoretical part of the module. The most important points are explained in detail so that they can be understood not only by the students but also by the supervisors in the company. <ul style="list-style-type: none">a) Assessment environment status in stable, air, gasses, light, microorganisms. Fast tests in stable.b) Assessment of the water hygiene on the farm.c) Hygiene and prophylaxis measures in the livestock farms. Program of prophylactic measures according to species of animal, categories etc. How	

<p>to control it.</p> <p>d) Knowing with main disinfectants, types of disinfectants, disinfection techniques</p> <p>e) Assessment of the program of disinfestation on the farms.</p> <p>f) Assessment microbiological situation of the stable.</p> <p>g) Evaluate manure management in the farm and its influence on animal health, production and quality of the products.</p>	
<p>Concrete situations/examples/case study from the farm/company/business</p> <p><i>Concrete situations/examples/case study from the farm/company where the student has carried out the practice, related to the contents of the practical training of the relevant module. A precise timetable for the work/solution of each situation/example should be in place.</i></p>	
I	<ul style="list-style-type: none"> – Assessment environment status in stable, air, gasses, light, microorganisms – Fast tests in the stable. – Assessment of water hygiene on the farm <p>(3 practice days or 18 hour)</p>
II	<ul style="list-style-type: none"> – Hygiene and prophylaxis measures in the livestock farms. – Assessment program of the prophylactic measures according to species of animal, categories etc. – How to control it effectiveness of the of prophylactic program. <p>(3 practice days or 18 hours)</p>
III	<ul style="list-style-type: none"> – Program of disinfestation on the livestock farm. – Knowing the main disinfectants used in farm, types of disinfectants, disinfection techniques. – Assessment quality and effectiveness of the disinfestation; <p>(10 practice days or 60 hours)</p>
IV	<ul style="list-style-type: none"> – Assessment microbial load of the stable <p>(2 practice days or 12 hrs)</p>
V	<ul style="list-style-type: none"> – Evaluation manure management in the farm and its influence on animal health, production and quality of the products. – Assessment of standards animal welfare in the farm. – Assessment of standards of animal welfare during the transport according type and age of animals in the practice farm. <p>(2 practice days or 12 hrs)</p>
<p>Learning methods: The methods of work-based learning must be described.</p>	
<p>Results/outcomes of the on-farm/company practice</p> <p>Based on:</p> <ul style="list-style-type: none"> – Written practice report – Report – PPT presentations – Project Work 	
<p>Guideline for Project Work, if elected in the respective module</p> <p>All elements of the project work should be explained in detail, i.e. aim/justification,</p>	

research question, hypothesis, methods of carrying out the project work and working with the responsible lecturer and supervisor in the farm/company, results and discussion, conclusions and presentation of the work and evaluation.

Evaluation/assessment methods of practical part, based on:

- Written practice report (70%)
- PPT presentations (30%)

Project Work:

- Written report (70%)
- PPT presentations (30%)

Appendices: e.g., templates for the implementation of the objectives, elaboration of situations/examples/case study from the farm/company and for the elaboration of the project work, if it has been chosen in the respective module.

2.5 AGRICULTURE MECHANISATION

Prepared by Prof. Dr. Skender Muji

Lecturer: Prof. Dr. Mentor Thaqi, Prof. Dr. Skender Muji	
Workload: 5 ECTS	
Semester: III	
Type: Compulsory	
Study Program: Bsc. Animal Production	
Code:	
Lecture`s email: mentor.thaqi@uni-pr.edu, skender.muji@uni-pr.edu	
Summary and learning outcomes	
Aim:	
Students acquire the necessary practical knowledge and skills as a farmer or professionals on the Mechanization and housing in livestock production.	
Objectives of the module:	
Students describe, analyses and reflects (also in form of proposals for improvement) basic practical knowledge in the following areas of Mechanization and Housing in Livestock Farms as follows:	
<ul style="list-style-type: none">– Assessment of the water supply in the livestock farm: infrastructure, calculation of require resource und supply.– Assessment of mechanization of forage production and feed processing in farm: cultivation harvesting, feed processing and conservation (silage, hay ect).– Assessment of the mechanization of milking in dairy farms and of milk cooling, storage.– Mechanization of the transport and processing of manure in farms.– Planning of livestock farms (location, application and approval procedures ect).– Evaluation the standards of stable construction in the farm according to species category of animals (ventilation, light, space, feeders, drinkers etc).– Livestock automatisation and digitalization.	
Topics of practical training	
Topics are related to the theoretical part of the module. The most important points are explained in detail so that they can be understood not only by the students but also by the supervisors in the company.	
A. Livestock Mechanization:	
<ul style="list-style-type: none">– Assessment of the water supply in the livestock farm: infrastructure, calculation of requirements, resource und supply.	

- Assessment of mechanization of forage production in farm.
- Mechanization of cultivation, harvesting, processing and transport of forage.
- Mechanization of forage conservation (silage, hay ect) and concentrate processing.
- Assessment of the mechanization of milking in dairy farms.
- Assessment of the milk cooling, storage.
- Assessment of the feed processing and feeding (include transport and distributed in the stable) for the animal species and categories kept on the farm.
- Calculation capacity of feeding system
- Mechanization of the transport and processing of manure in farms.

B. Livestock Housing:

- Planning of livestock farms (location, application and approval procedures ect)
- Evaluation the standards of stable construction in the farm according to animal species, category system of production ect.
- Quantity and quality of space, ventilation, light, feeders, drinkers etc)

Concrete situations/examples/case study from the farm/company/business

Concrete situations/examples/case study from the farm/company where the student has carried out the practice, related to the contents of the practical training of the relevant module. A precise timetable for the work/solution of each situation/example should be in place.

I	<ul style="list-style-type: none"> – Assessment of the water supply in the farm: infrastructure, calculation of requirements, resource und supply. <p>(3 practice days or 18 hour)</p>
II	<ul style="list-style-type: none"> – Assessment of mechanization of forage production in farm; – Mechanization of forage cultivation; – Mechanization of harvesting, processing and transport of forage; – Mechanization of forage conservation (silage, hay ect); – Mechanization of concentrate processing <p>(3 practice days or 18 hours)</p>
III	<ul style="list-style-type: none"> – Assessment of the mechanization and automatization of milking in dairy farms. – Assessment of the milk cooling and storage. - Assessment quality and effectiveness of the disinfestation; <p>(10 practice days or 60 hours)</p>
IV	<ul style="list-style-type: none"> – Assessment of the of feed processing and feeding (include transport and distributed in the stable) for the animal species and categories kept on the farm; – Calculation capacity of feeding system;

	<ul style="list-style-type: none"> – Mechanization of the transport and processing of manure in farms. (2 practice days or 12 hrs)
V	<p>B. Housing</p> <ul style="list-style-type: none"> – Planning of livestock farms (criteria of location, application and approval procedures ect); – Evaluation the standards of stable construction in the farm according to animal species, category system of production etc. – How the quantity and quality of facilities of the stable (space, ventilation, light, feeders, drinkers draining etc) are in the stable. <p>(2 practice days or 12 hrs)</p>
Learning methods: The methods of work-based learning must be described.	
Results/outcomes of the on-farm/company practice	
<p>Based on:</p> <ul style="list-style-type: none"> – Written practice report – Report – PPT presentations – Project Work 	
Guideline for Project Work, if elected in the respective module	
<p>All elements of the project work should be explained in detail, i.e. aim/justification, research question, hypothesis, methods of carrying out the project work and working with the responsible lecturer and supervisor in the farm/company, results and discussion, conclusions and presentation of the work and evaluation.</p>	
Evaluation/assessment methods of practical part, based on:	
<ul style="list-style-type: none"> – Written practice report (70%) – PPT presentations (30%) 	
Project Work:	
<ul style="list-style-type: none"> – Written report (70%) – PPT presentations (30%) 	
Appendices: e.g., templates for the implementation of the objectives, elaboration of situations/examples/case study from the farm/company and for the elaboration of the project work, if it has been chosen in the respective module.	

2.6 INTRODUCTION TO FARM BUSSINES MANAGEMENT

Prepared by Prof. Asoc. Dr. Alltane Kryeziu

Lecturer: Prof. Asoc. Dr. Alltane Kryeziu

Workload: 5 ECTS

Semester: VI

Type: Compulsory

Study Program: BSc. Animal Production

Code:

Lecture`s email: alltane.kryeziu@uni-pr.edu

Summary and learning outcomes

Aim:

Students acquire the necessary practical knowledge in Introduction to Farm Business Management focused in livestock farms.

Objectives of the module:

Students describe, analyses and reflects (also in form of proposal for improvement) on followed topics:

- Economic of milk, meat (beef, pork, lamb, broiler), egg production:
- Farm balance sheet; -Budget statement of income and expenses
- Profit and loss account
- Farm analyses: Success analyses, account of farm production cost
- Draft on farm business plan
- Evaluation of farm business size
- Assessment of business efficiency.

Topics of practical training

Topics are related to the theoretical part of the module. The most important points are explained in detail so that they can be understood not only by the students but also by the supervisors in the company:

- Assessment of the situation of livestock farm/family farm (milk, meat, eggs etc)
- Knowing the source of information needed and kept in the farm
- How the information is used?
- Farm balance sheet and its use
 - Statement of income and expenses
 - Profit and loss account

- Farm analyses
 - Account of farm production cost. Variable and fix cost

- Farm business plan
 - Farm budget
 - Evaluation of farm business size
 - Assessment of farm business efficiency

Concrete situations/examples/case study from the farm/company/business

Concrete situations/examples/case study from the farm/company where the student has carried out the practice, related to the contents of the practical training of the relevant module. A precise timetable for the work/solution of each situation/example should be in place.

I	Assessment of the situation of livestock farm/family farm (milk, meat, eggs etc) farm: <ul style="list-style-type: none"> – Knowing the source of information needed and kept in the farm. – How the information is used? (2 practice day or 12 hrs)
II	Knowing the farm balance sheet and its use: <ul style="list-style-type: none"> – Statement of income and expenses; – Profit and loss account. (2 practice day or 12 hrs)
III	Farm analysis: <ul style="list-style-type: none"> – Direction of the farm; – The technology used; – The links to market; – Account of farm production cost. Variable and fix cost in dairy farms, beef cattle farm; pig farm. (2 practice day or 12 hrs)
IV	<ul style="list-style-type: none"> – Draft on farm business plan. – Farm budget. (2 practice day or 12 hrs)
V	<ul style="list-style-type: none"> – Evaluation of farm business size. – Assessment of business efficiency (2 practice day or 12 hrs)

Learning methods: The methods of work-based learning must be described.

Results/outcomes of the on-farm/company practice

Based on:

- **Written practice report – Report**

- PPT presentations
- Project Work

Guideline for Project Work

All elements of the project work should be explained in detail, i.e. aim/justification, research question, hypothesis, methods of carrying out the project work and working with the responsible lecturer and supervisor in the farm/company, results and discussion, conclusions and presentation of the work and evaluation.

Evaluation/assessment methods of practical part

- Written practice report (70%)
- PPT presentations (30%)

Project Work:

- Written report (70%)
- PPT presentations (30%)

Appendices: e.g., templates for the implementation of the objectives, elaboration of situations/examples/case study from the farm/company and for the elaboration of the project work, if it has been chosen in the respective module.

2.7 CATTLE PRODUCTION

Prepared by Prof. Ass. Dr. Alltane Kryeziu

Lecturer: Prof. Ass. Dr. Fatos Krasniqi	
Workload: 6 ECTS Semester: V Type: Compulsory Study Program: Bsc. Animal Production Code: Lecture`s email: fatos.krasniqi@uni-pr.edu	
Summary and learning outcomes Aim: During practical phase, students deepen the theoretical knowledge acquired in the 2 nd , 3 rd and 4 th semesters and apply it in the practice of cattle production in the form of integrated zootechnical and economic cattle farm management. Objectives of the module: During practical period, students deepen the theoretical knowledge acquired in 2 nd , 3 rd and 4 th semesters and apply it in the practice of cattle farming, especially in the following subject areas: Feeding, breeding and reproduction, hygiene, husbandry systems and animal welfare, safety on the farm, quality and safety of primary cattle products and profitability of cattle production. All these aspects are called "Integrated (zootechnical and economic) cattle management". This means that the student combines all the knowledge acquired during his Bachelor's degree and applies it in this case to cattle production in the farm(s) where he does his practice.	
Topics of practical training Topics are related to the theoretical part of the module. The most important issues are explained in detail so that they can be understood not only by the students but also by the supervisors in the farm/business. Students describe, analysis and reflects (also in form of proposals for improvement) on following topics: <ul style="list-style-type: none">– Feeding technologies used for different cattle categories (dairy cows, calf rearing, breeding cattle, heifers, fattening calves, fattening cattle, fattening bulls);– Technologies of husbandry and housing used in the farm for different cattle categories under intensive (stable) cattle production system;	

- Extensive cattle ruminant production system using grassland and natural pastures;
- Breeding methods/techniques used in the dairy farm;
- Reproduction techniques applied in the dairy farm;
- Milk and meat production, quality and safety: monitoring of growth and meat performance parameters; monitoring of quality and safety of primary milk and meat produced by cattle;
- Economic of dairy and meat cattle production;
- Evaluation of standards of Animal Care for Dairy and Beef Cattle Farms.

Concrete situations/examples/case study from the farm/company/business

Concrete situations/examples/case study from the farm/company where the student has carried out the practice, related to the contents of the practical training of the relevant module. A precise timetable for the work/solution of each situation/example should be in place.

I	Feeding technologies used for different cattle categories (dairy cows, calf rearing, breeding cattle, heifers, fattening calves, fattening cattle, fattening bulls). (3 practice days or 18 hour)
II	Technologies of husbandry and housing used in the farm for different cattle categories under intensive (stable) cattle production system. (3 practice days or 18 hours)
III	Extensive cattle ruminant production system using grassland and natural pastures. (1 practice days or 6 hours)
IV	Breeding methods/techniques used in the dairy farm (3 practice days or 18 hours)
V	Reproduction techniques applied in the dairy farm. (2 practice days or 12 hrs)
VI	Milk and meat production, quality and safety: monitoring of growth and meat performance parameters; monitoring of quality and safety of primary milk and meat produced by cattle. (3 practice days or 18 hrs)
VII	Economic of dairy and meat cattle production. (2 practice days or 12 hours)
VIII	Evaluation of standards of Animal Care for Dairy and Beef Cattle Farms. (2 practice days or 12 hours)

Learning methods: The methods of work-based learning must be described.

Results/outcomes of the on-farm/company practice

Based on:

- **Written practice report – Report**
- **PPT presentations**
- **Project Work**

Guideline for Project Work, if elected in the respective module

All elements of the project work should be explained in detail, i.e. aim/justification, research question, hypothesis, methods of carrying out the project work and working with the responsible lecturer and supervisor in the farm/company, results and discussion, conclusions and presentation of the work and evaluation.

Evaluation/assessment methods of practical part, based on:

- Written practice report (70%)
- PPT presentations (30%)

Project Work:

- Written report (70%)
- PPT presentations (30%)

Appendices: e.g., templates for the implementation of the objectives, elaboration of situations/examples/case study from the farm/company and for the elaboration of the project work, if it has been chosen in the respective module.

2.8 SMALL RUMINANT PRODUCTION

Prepared by Prof. Asoc. Dr. Alltane Kryeziu

Lecturer: Prof. Ass. Hysen Bytyqi & Florian Plaku

Workload: 6 ECTS

Semester: V

Type: Compulsory

Study Program: BSc. Animal Production

Code:

Lecture`s email: hysen.bytyqi@uni-pr.edu

Summary and learning outcomes

Aim:

In third practical period, students deepen the theoretical knowledge acquired in the 2nd, 3rd and 4th semesters and apply it in the practice of small ruminant production in the form of integrated zootechnical and economic small ruminant farm management.

Objectives of the module:

In practical period, students deepen the theoretical knowledge acquired in the 3rd, 4th and 5th semesters and apply it in the practice of small ruminant farming, especially in the following subject areas: Feeding, breeding and reproduction, hygiene, husbandry systems and animal welfare, safety on the farm, quality and safety of primary sheep and goat products and profitability of small ruminant production. All these aspects are called "Integrated (zootechnical and economic) small ruminant management". This means that the student combines all the knowledge acquired during his Bachelor's degree and applies it in this case to small ruminant production in the farm(s) where he does his practice

Topics of practical training

Topics are related to the theoretical part of the module. The most important points are explained in detail so that they can be understood not only by the students but also by the supervisors in the farm/company.

Students describe, analysis and reflects (also in form of proposals for improvement) on following topics:

- Feeding technologies used for different small ruminants' categories (dairy sheep, breeding sheep, fattening lambs, dairy goat, breeding goat, fattening goat lambs);
- Technologies of husbandry and housing used in the farm for different small ruminant categories during winter time;
- Extensive small ruminant production system using natural pastures;

- Breeding methods/techniques used in the small ruminant farm;
- Reproduction techniques applied in the small ruminant farm;
- Milk and meat production, quality and safety: monitoring of growth and meat performance parameters; monitoring of quality and safety of primary milk and meat produced by small ruminants;
- Economic of small ruminant production;
- Evaluation of standards of Animal Care for small ruminant farms.

Concrete situations/examples/case study from the farm/company/business

Concrete situations/examples/case study from the farm/company where the student has carried out the practice, related to the contents of the practical training of the relevant module. A precise timetable for the work/solution of each situation/example should be in place.

I	Feeding technologies used for different small ruminants' categories (dairy sheep, breeding sheep, fattening lambs, dairy goat, breeding goat, fattening goat lambs). (2 practice day or 12 hrs)
II	Technologies of husbandry and housing used in the farm for different small ruminant categories during winter time. (2 practice day or 12 hrs)
III	Extensive small ruminant production system using natural pastures. (2 practice day or 12 hrs)
IV	Breeding methods/techniques used in the dairy farm. (2 practice day or 12 hrs)
V	Reproduction techniques applied in the small ruminant farm. (2 practice day or 12 hrs)
VI	Milk and meat production, quality and safety: monitoring of growth and meat performance parameters; monitoring of quality and safety of primary milk and meat produced by small ruminants. (3 practice day or 12 hrs)
VII	Economic of small ruminant milk and meat production. (2 practice day or 12 hrs)
VIII	Evaluation of standards of Animal Care for small ruminant farms. (2 practice days of 12 hrs)

Learning methods: The methods of work-based learning must be described.

Results/outcomes of the on-farm/company practice

Based on:

- **Written practice report – Report**
- **PPT presentations**

– **Project Work**

Guideline for Project Work

All elements of the project work should be explained in detail, i.e. aim/justification, research question, hypothesis, methods of carrying out the project work and working with the responsible lecturer and supervisor in the farm/company, results and discussion, conclusions and presentation of the work and evaluation.

Evaluation/assessment methods of practical part

- Written practice report (70%)
- PPT presentations (30%)

Project Work:

- Written report (70%)
- PPT presentations (30%)

Appendices: e.g., templates for the implementation of the objectives, elaboration of situations/examples/case study from the farm/company and for the elaboration of the project work, if it has been chosen in the respective module.

2.9 PIG PRODUCTION

Prepared by Prof. Asoc. Dr. Alltane Kryeziu

Lecturer: Prof. Asoc. Alltane Kryeziu

Workload: 6 ECTS

Semester: V

Type: Compulsory

Study Program: BSc. Animal Production

Code:

Lecture`s email: alltane.kryeziu@uni-pr.edu

Summary and learning outcomes

Aim:

Students acquire the necessary practical knowledge in pig production in the form of integrated zoo technical and economic pig farm.

Objectives of the module:

Students will apply the knowledge gained during the lectures in practice, especially in these areas: Nutrition, breeding and reproduction, systems of holding and welfare of pigs, safety on the farm, assessment of pork quality and profitability analysis, the economic, social and environmental challenges in the pork industry. This means that the student combines all the knowledge obtained during the lectures and applies them during the practice on the farm.

Topics of practical training

Topics are related to the theoretical part of the module. The most important points are explained in detail so that they can be understood not only by the students but also by the supervisors in the company:

Students describe, analysis and reflects (also in form of proposals for improvement) on following topics:

- Feeding technologies used for different pig categories (sows, piglets, growing-finishing pigs, breeding pigs, fattening pigs);
- Technologies of husbandry and housing used in the farm for different pig categories;
- Breeding methods/techniques used in the pig farm;
- Reproduction techniques applied in the pig farm;
- Meat production, quality and safety: monitoring of growth and meat performance parameters; monitoring of quality and safety of primary meat product;
- Economic of pig farm production;
- Evaluation of standards of Animal Care for pig farms

Concrete situations/examples/case study from the farm/company/business

Concrete situations/examples/case study from the farm/company where the student has carried out the practice, related to the contents of the practical training of the relevant module. A precise timetable for the work/solution of each situation/example should be in place.

I	<ul style="list-style-type: none">- Feeding technologies used for different pig categories (sows, piglets, growing-finishing pigs, breeding pigs, fattening pigs)- Technologies of husbandry and housing used in the farm for different pig categories, hygiene and welfare of different category of pigs. (2 practice days or 12 hrs)
II	<ul style="list-style-type: none">- The farrowing process and assistance to the sow during farrowing, to dry the piglets after birth with a cloth to remove waste from the nose and mouth,- Weighs, records weight, records gender and time of birth and places the piglets near the breast to suckle. (1 practice days or 6 hrs)
III	<ul style="list-style-type: none">- Castrate male pigs- Cut the tails, give the injection against iron deficiency- At the age of 21 days, weigh each piglet until weaning (according to the farmer's schedule)- Calculation of body weight gain of piglets- Register the causes of mortality before weaning (2 practice days or 12 hrs)
IV	<ul style="list-style-type: none">- After weaning, the sow was artificially inseminated, but with the help of a veterinarian- Weight the sow before farrowing and on the day of weaning and calculate weight gain or loss- Records the time interval between the birth of piglets one after the other and the duration of the farrowing time. (2 practice days or 12 hrs)
V	<ul style="list-style-type: none">- On-farm safety, quality and safety of primary pig products and profitability of pig products. Evaluation of standards of Animal Care for pig farms.- Recording of any vaccinations or treatments received by sows or goats- Economic of pig farm production (2 practice days or 12 hrs)
VI	<ul style="list-style-type: none">- Preparing practical report in a word format- During the practice student have to make a short video of each process and collect in one video 5 – 10 min. and put it in you tube. (2 practice days or 12 hrs)

Learning methods: The methods of work-based learning must be described.

Results/outcomes of the on-farm/company practice

Based on:

- **Written practice report – Report**
- **PPT presentations**
- **Project Work**

Guideline for Project Work

All elements of the project work should be explained in detail, i.e. aim/justification, research question, hypothesis, methods of carrying out the project work and working with the responsible lecturer and supervisor in the farm/company, results and discussion, conclusions and presentation of the work and evaluation.

Evaluation/assessment methods of practical part

- Written practice report (70%)
- PPT presentations (30%)

Project Work:

- Written report (70%)
- PPT presentations (30%)

Appendices: e.g., templates for the implementation of the objectives, elaboration of situations/examples/case study from the farm/company and for the elaboration of the project work, if it has been chosen in the respective module.

2.10 POULTRY PRODUCTION

Prepared by Prof. Asoc. Dr. Alltane Kryeziu

Lecturer: Prof. Asoc. Dr. Alltane Kryeziu

Workload: 6 ECTS

Semester: V

Type: Compulsory

Study Program: BSc. Animal Production

Code:

Lecture`s email: alltane.kryeziu@uni-pr.edu

Summary and learning outcomes

Aim:

Students acquire the necessary practical knowledge in poultry production in the form of integrated zootechnical and economic poultry farm.

Objectives of the module:

Students will apply the knowledge gained during the lectures in practice, especially in these areas: Nutrition, breeding and reproduction, systems of rearing and welfare of chicken, safety on the farm, assessment of poultry products quality and profitability analysis, the economic, social and environmental challenges in the poultry industry. This means that the student combines all the knowledge obtained during the lectures and applies them during the practice on the farm.

Topics of practical training

Topics are related to the theoretical part of the module. The most important points are explained in detail so that they can be understood not only by the students but also by the supervisors in the company:

Students describe, analysis and reflects (also in form of proposals for improvement) on following topics:

- Feeding technologies used for different poultry categories (broiler, pullets, laying hens, turkey fattening, geese and ducks, quails);
- Technologies of husbandry and housing used in the farm for different poultry categories;
- Breeding methods/techniques used in the poultry farm;
- Reproduction techniques applied in the chicken farm;
- Meat production, quality and safety: monitoring of growth and meat performance parameters; monitoring of quality and safety of primary meat product;

<ul style="list-style-type: none"> • Economic of poultry farm production; • Evaluation of standards of Animal Care for poultry farms 	
<p>Concrete situations/examples/case study from the farm/company/business</p> <p><i>Concrete situations/examples/case study from the farm/company where the student has carried out the practice, related to the contents of the practical training of the relevant module. A precise timetable for the work/solution of each situation/example should be in place.</i></p>	
I	<ul style="list-style-type: none"> – Identification of chicken body parts (beak, wattle, comb, wing, nostrils, eye, ear lobe, legs, tail, vent) – Methods of poultry identification (wing bands, leg bands, toe punches, neck tags, chicken bits) <p>(2 practice day or 12 hrs)</p>
II	<ul style="list-style-type: none"> – Hatching periods (sanitation of equipment, candling eggs, temperature during incubation, egg quality for incubation, egg turning, embryos development, etc.) <p>(2 practice day or 12 hrs)</p>
III	<p>Balance ratio for poultry</p> <ul style="list-style-type: none"> – Feeding technologies used for different poultry categories (starting poultry feed, growing poultry feed, fattening poultry feed, laying poultry feed) – Technologies of husbandry and housing used in the farm for different chicken categories, hygiene and welfare of different category of chicken. – Housing check 3-5 time/day <p>(2 practice day or 12 hrs)</p>
IV	<p>Feed requirement</p> <ul style="list-style-type: none"> – Feed requirement for different classes of poultry <ul style="list-style-type: none"> – layer – chicks, grower, pre-layer, layer; broiler – pre-starter, starter, grower, finisher) <p>Principle point for consideration of feed formulation</p> <ul style="list-style-type: none"> – Easy availability of ingredients – Palatability of ingredients – Maximum inclusion levels in feed – Cost of ingredients – Nutrient composition and quality of each ingredients – Nutrient requirement for poultry according to age weight, class, type, etc. <p>(2 practice days or 12 hrs)</p>
V	<ul style="list-style-type: none"> – On-farm safety, quality and safety of primary poultry products and profitability of poultry products. – Evaluation of standards of Animal Care for poultry farms.

	<ul style="list-style-type: none"> – Recording of any vaccinations or treatments received by chickens – Economic of poultry farm production <p>(2 practice day or 12 hrs)</p>
VI	<ul style="list-style-type: none"> – Preparing practical report in a word format – During the practice student have to make a short video of each process and collect in one video 5 – 10 min. and put it in you tube. <p>(2 practice day or 12 hrs)</p>
Learning methods: The methods of work-based learning must be described.	
Results/outcomes of the on-farm/company practice	
Based on: <ul style="list-style-type: none"> – Written practice report – Report – PPT presentations – Project Work 	
Guideline for Project Work All elements of the project work should be explained in detail, i.e. aim/justification, research question, hypothesis, methods of carrying out the project work and working with the responsible lecturer and supervisor in the farm/company, results and discussion, conclusions and presentation of the work and evaluation.	
Evaluation/assessment methods of practical part <ul style="list-style-type: none"> – Written practice report (70%) – PPT presentations (30%) Project Work: <ul style="list-style-type: none"> – Written report (70%) – PPT presentations (30%) 	
Appendices: e.g., templates for the implementation of the objectives, elaboration of situations/examples/case study from the farm/company and for the elaboration of the project work, if it has been chosen in the respective module.	

2.11 HORSE FARM MANAGEMENT

Prepared by Prof. Asoc. Dr. Alltane Kryeziu

Lecturer: Prof. Asoc. Alltane Kryeziu
Workload: 6 ECTS Semester: IV or VI Type: Elective Study Program: BSc. Animal Production Code: Lecture`s email: alltane.kryeziu@uni-pr.edu
Summary and learning outcomes Aim: During this practice time, students deepen the theoretical knowledge acquired in the 2 nd , 3 rd , 4 th and 5 th semesters and apply it in the practice of horse production in the form of integrated zootechnical and economic horse farm management. Objectives of the module: Students of this level of studies can acquire general and special knowledge and skills for the application of horse breeding and feeding practices. Also, this course aims to provide all knowledge related to reproduction (recognition and function of reproductive physiology, genetic characteristics of horses, lactation and production of mares in the period of milk production. Principles of nutrition of all categories of horses. Horse care and accommodation.
Topics of practical training Topics are related to the theoretical part of the module. The most important points are explained in detail so that they can be understood not only by the students but also by the supervisors in the company: Students describe, analysis and reflects (also in form of proposals for improvement) on following topics: <ul style="list-style-type: none">– Identify horse breeds and know their anatomical characteristics.– Technologies of husbandry and housing used in the farm for horse categories;– Breeding methods/techniques used in horse farm;– Reproduction techniques applied in the horse farm;– Feeding and grazing technologies / system used for different horse categories (mares, foals, breeding horses, growing horses, riding horses, working horses);– They completely identify the reproductive cycle and the phases of this cycle.

- Monitoring of growth performance parameters of foals and growing horses;
- Training of riding and race horses;
- Economic of horse farm;
- Evaluation of standards of Animal Care in the horse farms.
- Identify problems that arise in the field of breeding and nutrition and find the best alternative for problem solving.

Concrete situations/examples/case study from the farm/company/business

Concrete situations/examples/case study from the farm/company where the student has carried out the practice, related to the contents of the practical training of the relevant module. A precise timetable for the work/solution of each situation/example should be in place.

I	Feeding and grazing technologies/system used for different horse categories (mares, foals, breeding horses, growing horses, riding horses, working horses). (1 practice day or 6 hrs)
II	Technologies of husbandry and housing used in the farm for different horse categories. Breeding methods/techniques used in the horse farm. (2 practice day or 12 hrs)
III	Monitoring of growth performance parameters of foals and growing horses. Reproduction techniques applied in the horse farm. (2 practice day or 12 hrs)
IV	Training of riding and race horses. (1 practice day or 6 hrs)
V	Economic of horse farm. (1 practice day or 6)
VI	Evaluation of standards of Animal Care in the horse husbandry. (1 practice day or 6 hrs)

Learning methods: The methods of work-based learning must be described.

Results/outcomes of the on-farm/company practice

Based on:

- **Written practice report – Report**
- **PPT presentations**
- **Project Work**

Guideline for Project Work

All elements of the project work should be explained in detail, i.e. aim/justification, research question, hypothesis, methods of carrying out the project work and working with the responsible lecturer and supervisor in the farm/company, results and discussion, conclusions and presentation of the work and evaluation.

Evaluation/assessment methods of practical part

- Written practice report (70%)
- PPT presentations (30%)

Project Work:

- Written report (70%)
- PPT presentations (30%)

Appendices: e.g., templates for the implementation of the objectives, elaboration of situations/examples/case study from the farm/company and for the elaboration of the project work, if it has been chosen in the respective module.

2.12 BEEKEEPING

Prepared by Prof. Dr. Lumturi Sena

Lecturer: Prof. Dr. Lumturi Sena and Prof. Ass. Dr. Fatos Krasniqi

Workload: 6 ECTS

Semester: VI or VI

Type: Elective

Study Program: BSc. Animal Production

Code:

Lecture`s email: fatos.krasniqi@uni-pr.edu

Summary and learning outcomes

Aim:

In this practical part, students deepen the theoretical knowledge acquired in the 2nd, 3rd, 4th and 5th semesters and apply it in the practice of bee production in the form of integrated zootechnical and economic bee farm management.

Objectives of the module:

In this practical part, students deepen the theoretical knowledge acquired in the 3rd, 4th and 5th semesters and apply it in the practice of bee farming, especially in the following subject areas: Feeding, breeding and reproduction, hygiene, husbandry systems and animal welfare, safety on the farm, quality and safety of primary bee products and profitability of bee production. All these aspects are called "Integrated (zootechnical and economic) bee farm management". This means that the student combines all the knowledge acquired during his Bachelor's degree and applies it in this case to bee production in the farm(s) where he does his practice.

Topics of practical training

Topics are related to the theoretical part of the module. The most important points are explained in detail so that they can be understood not only by the students but also by the supervisors in the company:

Students describe, analysis and reflects (also in form of proposals for improvement) on following topics:

- Beehive, inventory of the bee park and of beekeepers (beekeepers);
- Establishment of a bee farm;
- Beebreeding techniques used in the bee farm;
- Beefeeding, bee pasture and honey plants;
- Techniques for opening and control of the beehive; -Rearing of the queen bee;

<ul style="list-style-type: none"> – Honey quality and safety; – Economic of bee farm. 	
<p>Concrete situations/examples/case study from the farm/company/business</p> <p><i>Concrete situations/examples/case study from the farm/company where the student has carried out the practice, related to the contents of the practical training of the relevant module. A precise timetable for the work/solution of each situation/example should be in place.</i></p>	
I	Beehive, inventory of the bee park and of beekeepers (beekeepers). (1 practice day or 6 hrs)
II	Establishment of a bee farm. (1 practice day or 6 hrs)
III	Bee breeding techniques used in the bee farm. (1 practice day or 6 hrs)
IV	Bee feeding, bee pasture and honey plants (1 practice day or 6 hrs)
V	Techniques for opening and control of the beehive. (1 practice day or 6 hrs)
VI	Rearing of the queen bee. Honey quality and safety (1 practice day or 7 hrs)
VII	Economic of bee farm. (1 practice day or 6 hrs)
<p>Learning methods: The methods of work-based learning must be described.</p>	
<p>Results/outcomes of the on-farm/company practice</p> <p>Based on:</p> <ul style="list-style-type: none"> – Written practice report – Report – PPT presentations – Project Work 	
<p>Guideline for Project Work</p> <p>All elements of the project work should be explained in detail, i.e. aim/justification, research question, hypothesis, methods of carrying out the project work and working with the responsible lecturer and supervisor in the farm/company, results and discussion, conclusions and presentation of the work and evaluation.</p>	
<p>Evaluation/assessment methods of practical part</p> <ul style="list-style-type: none"> – Written practice report (70%) – PPT presentations (30%) <p>Project Work:</p> <ul style="list-style-type: none"> – Written report (70%) – PPT presentations (30%) 	
<p>Appendices: e.g., templates for the implementation of the objectives, elaboration of situations/examples/case study from the farm/company and for the elaboration of the project work, if it has been chosen in the respective module.</p>	

2.13 AGRICULTURE POLICE AND LEGISLATION

Prepared by Prof. Dr. Fatos Krasniqi

Lecturer: Prof. Ass. Dr. Fatos Krasniqi

Workload: 5 ECTS

Semester: VI

Type: Compulsory

Study Program: BSc. Animal Production

Code:

Lecture`s email: fatos.krasniqi@uni-pr.edu

Summary and learning outcomes

Aim:

Students acquire the necessary practical knowledge and skills as professionals in Extension service in agriculture farms, especially in livestock farms and business.

Objectives of the module:

Students gain basic practical knowledge in the development policy and extension service on the following areas:

- Development of policies in agriculture and livestock in Kosovo as well as how they are drafted in Kosovo in accordance with EU policies.
- Public Management institutions of livestock sector on central (governmental), regional and local (municipalities) level.
- Organization of public Extension service in agriculture and livestock on central (governmental), regional and local (municipalities) level.
- Methods of advisory service used by extensionists, participating in all activities of extension.
- Links between higher education institutions and advisory service.
- Recognition of the work carried out at the advisory service as well as their links with the agricultural organizations.

Topics of practical training

Topics are related to the theoretical part of the module. The most important points are explained in detail so that they can be understood not only by the students but also by the supervisors in the institutions. The student on institution will learn:

I. Governmental Level: Ministry responsible Agriculture (Ministry of Agriculture Forestry and Rural Development).

- Ministry of Agriculture, Forestry and Rural Development. How the policies and programs of livestock and rural developments are designed by the responsible ministerial departments/units.
- Agency for the Development of Agriculture: Mission, legal framework, organization, structure, functions and its role in development of the Kosovo Agriculture, Food and

Rural sector.

- National Support Schemes for the agriculture and the IPARD program

II. Regional Level: Regional Directorates of Agriculture and Regional Agencies of Advisory (Extension) Service

- Regional Directorates of Agriculture (RDA): Mission, legal framework, organization, structure, function and their role in the development of agriculture, food and rural sector at regional and district level.
- National Authority of Food Safety: Mission, legal framework, organization, structure, function and their role in the implementation of policies, legal framework as well as of standards in food and feed safety.
- Kosovo Food and Veterinary Agency: Mission, legal framework, organization, structure, function and their role in the implementation of policies, legal framework as well as of standards in livestock sector as well as safety of primary animal-source products.
- Regional Agencies of Advisory (Extension) Service in Agriculture (RAA): Mission, legal framework, organization, structure, function and the role of extension service and information in the development of agriculture, food and rural sector at regional and district level.

III. Local or Municipality level: Municipality Department for Agriculture and Food Safety- Mission, legal framework, organization, structure, function and their role in the development of agriculture and livestock as well as in the implementation of legal framework and standards of food and feed safety.

IV. Level of Agriculture Technology Transfer Centers (ATTC): Mission, legal framework, organization, structure, functions and their role in development of the Kosovo Agriculture, Livestock and Rural sector.

Concrete situations/examples/case study from the farm/company/business

Concrete situations/examples/case study from the farm/company where the student has carried out the practice, related to the contents of the practical training of the relevant module. A precise timetable for the work/solution of each situation/example should be in place.

I	<p>Governmental Level: Ministry responsible Agriculture (Ministry of Agriculture Forestry and Rural Development)</p> <ul style="list-style-type: none">– Ministry of Agriculture, Forestry and Rural Development. How the policies and programs of livestock and rural developments are designed by the responsible ministerial departments/units.– Agency for the Development of Agriculture: Mission, legal framework, organization, structure, functions and its role in development of the
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	<p>Kosovo Agriculture, Food and Rural sector. How the IPARD programs are drafted.</p> <ul style="list-style-type: none"> – Knowing with the studies used for preparing the strategy for different sectors of agriculture and Rural Development as well as the IPARD Program. – How do the National Support Schemes for the agriculture and the IPARD program are applied? How the selection criteria are compiled, how winning farmers are selected? <p>(1 practice day or 6 hrs)</p>
II	<p>Regional Level: Regional Department of Agriculture and Regional Agencies of Advisory (Extension) Service.</p> <ul style="list-style-type: none"> – Regional Departments of Agriculture (RDA): Mission, legal framework, organization, structure, function and their role in the development of agriculture, food and rural sector at regional and district level. (2 practice days, 12 hrs). – National Authority of Food Safety and Regional Departments of Food Safety: Mission, legal framework, organization, structure, function and their role in the implementation of policies, legal framework as well as of standards in food and feed safety. (2 practices days, 12 hrs). – Kosovo Food and Veterinary Agency: Mission, legal framework, organization, structure, function and their role in the implementation of policies, legal framework as well as of standards in livestock sector as well as safety of primary animal-source products. (2 practice days, 12 hrs). – Regional Agencies of Advisory (Extension) Service in Agriculture (RAA): Mission, legal framework, organization, structure, function and the role of extension service and information in the development of agriculture, food and rural sector at regional and district level. (9 practice days, 54 hrs). <p>(4 practice days, 24 hrs).</p>
III	<p>Local or Municipality level: Municipality Department for Agriculture and Food Safety- Mission, legal framework, organization, structure, function and their role in the development of agriculture and livestock as well as in the implementation of legal framework and standards of food and feed safety. (2 practice days, 12 hrs).</p> <p>(2 practice day or 12 hrs)</p>
IV	<p>Level of Agriculture Technology Transfer Centers (ATTC): Mission, legal framework, organisation, structure, funtions and their role in development of the Kosovo Agriculture, Livestock and Rural sector.</p> <p>(1 practice days, 6 hrs).</p>
<p>Learning methods: The methods of work-based learning must be described.</p>	
<p>Results/outcomes of the on-farm/company practice</p>	

Based on:

- **Written practice report – Report**
- **PPT presentations**
- **Project Work**

Guideline for Project Work

All elements of the project work should be explained in detail, i.e. aim/justification, research question, hypothesis, methods of carrying out the project work and working with the responsible lecturer and supervisor in the farm/company, results and discussion, conclusions and presentation of the work and evaluation.

Evaluation/assessment methods of practical part

- Written practice report (70%)
- PPT presentations (30%)

Project Work:

- Written report (70%)
- PPT presentations (30%)

Appendices: e.g., templates for the implementation of the objectives, elaboration of situations/examples/case study from the farm/company and for the elaboration of the project work, if it has been chosen in the respective module.

2.14 ANIMAL REPRODUCTION AND ARTIFICIAL INSEMINATION

Prepared by Prof. Dr. Bajram Berisha

Lecturer: Prof. Bajram Berisha and Prof. Anila Hoda

Workload: 5 ECTS

Semester:

Type:

Study Program: Bsc. Animal Production

Code:

Lecture`s email: bajram.berisha@uni-pr.edu, ahoda@ubt.edu.al

Summary and learning outcomes

Aim:

Students acquire the necessary knowledge and skills as a farmer or professionals in field of animal reproduction and artificial insemination management. This course gives students an overview regarding animal's ability to physiologically adapt themselves on the environmental challenges and addresses the physical and chemical fundamental principles of physiological processes. Whereas, the major goal of this course is students critical thinking involvement in order to resolve problems/questions, especially in the field of animal reproduction and artificial insemination management in different domestic farm animals.

Objectives of the module:

The main objective of this course is to give the agricultural student a basic knowledge to understand and perform needed functions in field of animal reproduction.

- An introduction to physiological processes involved in reproduction of livestock. Processes examined will include anatomy of both male and female reproductive tracts, function of gonads, hormone and pheromone function, and fertility.
- Development of critical thinking of students, in order to resolve problems/questions in physiology of reproduction and AI management of different domestic farm animals.
- Discussion of reproductive management in the field of animal science to increase reproductive efficiency and improve animal genetic quality.
- Students will also receive instruction on how to perform AI in different farm animals.

Topics of practical training

Topics are related to the theoretical part of the module. The most important topics are explained in detail so that they can be understood not only by the students but also by the supervisors in the farm/company/businesses:

- Situs demonstration -- female anatomy & sexual organs;
- Situs demonstration -- male anatomy & sexual organs;
- Estrous (sexual) cycle determination in different farm animal;
- Heat detection symptoms in different farm animals;
- Visit to the animal "genetics center" for artificial insemination in Peja - the students will be introduced to the laboratory practices for achieving competence in sperm quality testing, the dilution process and the melting of cow sperm.

<ul style="list-style-type: none"> – Artificial insemination methods in different farm animals; – Pregnancy detection and observation in different animals; – Reproductive practice in different animal farms and systems. 	
<p>Concrete situations/examples/case study from the farm/company/business</p> <p><i>Concrete situations/examples/case study from the farm/company where the student has carried out the practice, related to the contents of the practical training of the relevant module. A precise timetable for the work/solution of each situation/example should be in place.</i></p>	
I	Assessment and determination of estrous (sexual) cycle (follicle and luteal phase) in different farm animal: cattle, small ruminants and pigs (3 practice days).
II	Heat detection symptoms during estrous cycle in different farm animals: cattle, small ruminants and pigs (3 practice days).
III	Introduction to the laboratory practices for achieving competence in sperm quality testing, the dilution process and the melting of cow sperm ("Genetic center" in Peja) (3 practice days).
IV	Practical introduction to artificial insemination methods in cows and pigs (4 practice days);
V	Practical knowledge in pregnancy detection and observation in cattle, small ruminants and pigs (3 practice days);
VI	Evaluation of reproductive practice in different farms of cattle, small ruminants and pigs (4 practice days).
<p>Learning methods: The methods of work-based learning must be described.</p>	
<p>Results/outcomes of the on-farm/company practice</p> <p>Based on:</p> <ul style="list-style-type: none"> – Written practice report – Report – PPT presentations – Project Work 	
<p>Guideline for Project Work, if elected in the respective module</p> <p>All elements of the project work should be explained in detail, i.e. aim/justification, research question, hypothesis, methods of carrying out the project work and working with the responsible lecturer and supervisor in the farm/company, results and discussion, conclusions and presentation of the work and evaluation.</p>	
<p>Evaluation/assessment methods of practical part, based on:</p> <ul style="list-style-type: none"> – Written practice report (70%) – PPT presentations (30%) <p>Project Work:</p> <ul style="list-style-type: none"> – Written report (70%) – PPT presentations (30%) 	
<p>Appendices: e.g., templates for the implementation of the objectives, elaboration of situations/examples/case study from the farm/company and for the elaboration of the project work, if it has been chosen in the respective module.</p>	

2.15 PLANT PROTECTION

Prepared by Prof. Dr. Arben Mehmeti

Lecturer: Prof. Dr. Arben Mehmeti	
Workload: 5 ECTS Semester: III Type: Compulsory Study Program: Bsc. Animal Production Code: Lecture`s email: arben.mehmeti@uni-pr.edu	
Summary and learning outcomes Aim: Students acquire the necessary practical knowledge and skills as a farmer or professionals in plant protection, as well as knowledge of pesticide use and their effect in environment. Objectives of the module: Students gain basic practical knowledge in the following areas of plant protection: <ul style="list-style-type: none">– The use of pesticide in fodder crops.– Determination of insects, diseases and weeds.– Practical assessment of the efficacy of pesticides.– Preparation and appropriate dosage of pesticides for use in the fodder crops.– Use of personal protection equipment.– Evaluation of different measures for control of disease, pests and weeds.– Evaluation of the effect of pesticides in environment (soil and water).	
Topics of practical training Topics are related to the theoretical part of the module. The most important topics are explained in detail so that they can be understood not only by the students but also by the supervisors in the farm/company/businesses: <ul style="list-style-type: none">– Storage of pesticide (criteria for storage of pesticide);– Direct risk from pesticides and ways to avoid this risk;– Determination of main insects, diseases and weeds;– Preparation of equipment for the pesticide use– Preparation of pesticide for spraying;– Forecasting of diseases based on the micro station;– Determination of poison weeds for the animal feeding;	
Concrete situations/examples/case study from the farm/company/business	

Concrete situations/examples/case study from the farm/company where the student has carried out the practice, related to the contents of the practical training of the relevant module. A precise timetable for the work/solution of each situation/example should be in place.

I	Appropriate storage of pesticides, the main condition for storage of pesticide (2 practice days or 12 hour)
II	Determination of main pests in fodder crops, e.g. methods how to determine pests in the field using different technics and forecasting of disease based on micro station (3 practice days or 18 hours)
III	Preparation of pesticide for the spraying in the field e.g. calibration of equipment's, dosage of pesticide, mixture of pesticide and amount of water, cleaning of equipment's after use of pesticide, use of personal protection equipment's, protection of environment and bookkeeping of used pesticide (10 practice days or 60 hours)
IV	Evaluation of the pesticide use and their effect to specific pests. (2 practice days or 12 hrs)
V	Evaluation of poison weeds in the farm in relation to the feeding of animals. (2 practice days or 12 hrs)

Learning methods: The methods of work-based learning must be described.

Results/outcomes of the on-farm/company practice

Based on:

- **Written practice report – Report**
- **PPT presentations**
- **Project Work**

Guideline for Project Work, if elected in the respective module

All elements of the project work should be explained in detail, i.e. aim/justification, research question, hypothesis, methods of carrying out the project work and working with the responsible lecturer and supervisor in the farm/company, results and discussion, conclusions and presentation of the work and evaluation.

Evaluation/assessment methods of practical part, based on:

- Written practice report (70%)
- PPT presentations (30%)

Project Work:

- Written report (70%)
- PPT presentations (30%)

Appendices: e.g., templates for the implementation of the objectives, elaboration of situations/examples/case study from the farm/company and for the elaboration of the project work, if it has been chosen in the respective module.

2.16 PRINCIPLE OF SOIL SCIENCE AND FERTILIZATION

Prepared by Prof. Dr. Muhamet Zogaj

Lecturer: Prof. Ass. Dr. Muhamet Zogaj

Workload: 5 ECTS

Semester: II

Type: Compulsory

Study Program: Bsc. Animal Production

Code:

Lecture`s email: muhamet.zogaj@uni-pr.edu

Summary and learning outcomes

Aim:

Students are informed and practice the soil sampling procedures, then to practice measurements in the field of soil properties. Provide knowledge and practice on the circulation of nutritional elements in nature, organic and mineral fertilizers and gain knowledge on the acquisition of contemporary methods and best practices in soil management, plant fertilization, and balance of nutritional elements.

Objectives of the module:

After successful completion of all practical activities, students are able:

- to be ready to make the soil sampling plan.
- to be ready to make field measurements of physical, chemical and biological properties of the soil.
- to know the basic work in lab.
- to know the organic and mineral fertilizers.
- to be able to apply fertilization in practice by keeping the balance of the nutrients on the soil.

Topics of practical training

Topics are related to the theoretical part of the module. The most important topics are explained in detail so that they can be understood not only by the students but also by the supervisors in the field/farm/company/businesses:

- Soil and organic manure sampling in the field;
- Measurement of physical, chemical and biological properties of soil in the field;
- Measurement of physical, chemical and biological properties of soil in the lab;
- Visit of different types of soil and discussion about the differences and similarities of soils;

- Calculation of fertilizer uses in different types of soil;
- Application of best practices in the use of fertilizer and nutrient balancing;
- Visit to livestock farms and discussion about manure management and environmental protection;

Concrete situations/examples/case study from the farm/company/business

Concrete situations/examples/case study from the farm/company where the student has carried out the practice, related to the contents of the practical training of the relevant module. A precise timetable for the work/solution of each situation/example should be in place.

I	Soil and organic manure sampling in the field (1 practice days or 8 hour)
II	Measurement of physical, chemical and biological properties of soil in the field (2 practice days or 12 hours)
III	Measurement of physical, chemical and biological properties of soil in the lab; (2 practice days or 12 hours)
IV	Visit of different types of soil and discussion about the differences and similarities of soils. (2 practice days or 12 hours)
V	Calculation of fertilizer uses in different types of soil and application of best practices in the use of fertilizer and nutrient balancing (2 practice days or 12 hours)
VI	Visit to livestock farms and discussion about manure management and environmental protection (2 practice days or 12 hours).

Learning methods: The methods of work-based learning must be described.

Results/outcomes of the on-farm/company practice

Based on:

- **Written practice report – Report**
- **PPT presentations**
- **Project Work**

Guideline for Project Work, if elected in the respective module

All elements of the project work should be explained in detail, i.e. aim/justification, research question, hypothesis, methods of carrying out the project work and working with the responsible lecturer and supervisor in the farm/company, results and discussion, conclusions and presentation of the work and evaluation.

Evaluation/assessment methods of practical part, based on:

- Written practice report (70%)
- PPT presentations (30%)

Project Work:

- Written report (70%)
- PPT presentations (30%)

Appendices: e.g., templates for the implementation of the objectives, elaboration of situations/examples/case study from the farm/company and for the elaboration of the project work, if it has been chosen in the respective module.