SEMESTER LEARNING PLAN (SLP)

GRAZING MANAGEMENT OF SMALL FARMING SYSTEM
(23I01120703)

TEACHING TEAM :

Prof. Dr. Ir. Budiman, MP.
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BACHELOR PROGRAMME IN ANIMAL HUSBANDRY
FACULTY OF ANIMAL SCIENCE
HASANUDDIN UNIVERSITY
MAKASSAR
2025

BACHELOR PROGRAMME IN ANIMAL HUSBANDRY
FACULTY OF ANIMAL SCIENCE
HASANUDDIN UNIVERSITY

Vision

Vision of the study program :
Becoming an international standard in livestock education provider based on the Indonesian Maritime Continent

Vision Strategy

In accordance with the vision, mission, and objectives that have been set, the Animal Husbandry Study Program of the Faculty of Animal Science sets the following objectives to be achieved:

a. Improving the quality of learning implementation that is in line with the needs of industry and society based on research and international standards;
b. Creating networks and partnerships in the development of Animal Husbandry science and technology and its utilization in the implementation of learning;
c. Producing graduates who have character, vision, creativity and innovation in the field of animal husbandry science and technology with an entrepreneurial perspective.

Mission

The mission carried out in the implementation of the Bachelor of Animal Husbandry Study Program, Faculty of Animal Husbandry, Hasanuddin University is

1) Organizing quality learning to produce independent and globally competitive Animal Husbandry scholars.
2) Developing animal husbandry science for the benefit of the nation.
3) Providing a conducive academic climate for implementing education with an entrepreneurial perspective.

Graduate Profiles

No	Profile	Description
1	Manager	Graduates who apply concepts and techniques in managing livestock farming and institutions related to livestock businesses such as financial institutions
2	Young Researcher	Graduates who able to apply scientific concepts and methods in solving problems in the development of the field of Animal Husbandry
3	Planners	Graduates who able to prepare potential and problem analysis, as well as formulate plans and strategies for the development of the livestock and related industries
4	Educators	Graduates who have the ability and skills to transfer science and technology to students in the field of animal husbandry
5	Entrepreneur	Graduates who able to apply business in the field of Animal Husbandry as their main business, or business development to support livestock business
6	Bureaucrat	Graduates who are able to organize government duties, especially in the affairs of livestock development

Learning Outcomes imposed on the Course

1) ILO-7 3 (P2) - Mastering the concept and solving livestock problems based on data, science, and scientific methods (K-02).

2) ILO-5 (KU2) - Able to make appropriate decisions in the context of problem solving, based on the results of data and information analysis (GS-02).

3) ILO-9 (KK3) - Skilled in managing livestock enterprises (SS-03).

Course Learning Outcomes (CLO)

CLO-1: Students are able to analyze the types of pastures and grazing methods in the tropics (CLO3)

CLO 2: Students are able to identify the nutrient needs of pastures, as well as weed control in pastures (CPL5)

CLO-3: Students are able to formulate planning, development, rehabilitation and utilization of pastures

(CPL9)

Sub-CLO

Sub-CLO 1: Able to explain about pastures and their types, as well as grazing methods

() Sub-CLO 2: Able to build and rehabilitate pastures ()

Sub-CLO 3: Able to improve soil fertility on pasture land

() Sub-CLO 4: Able to plan cropping model in pasture ()

Sub CLO 5: Able to plan the best defoliation ()

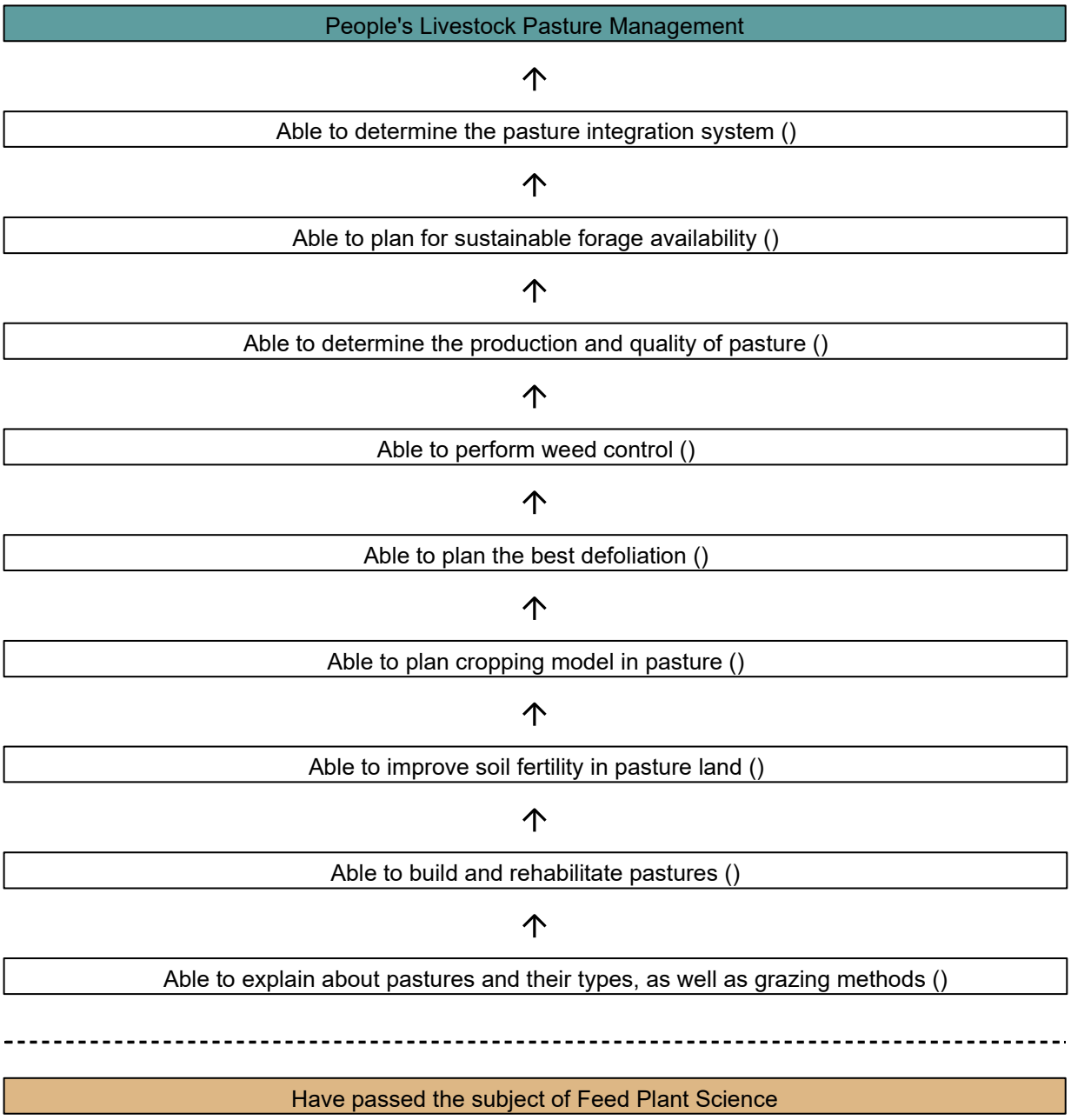
Sub CLO 6: Able to perform weed control ()

Sub-CLO 7: Able to determine the production and quality of pasture ()

Sub CLO 8: Able to plan the availability of forage in a sustainable manner ()

Sub CLO 9: Able to determine pasture integration system ()

Learning Analysis



HASANUDDIN UNIVERSITY
FACULTY OF ANIMAL SCIENCE
BACHELOR PROGRAMME IN ANIMAL HUSBANDRY

SEMESTER COURSE PLAN

Course	Code	Course Group	Credit Points	Semester	Date of Preparation
Grazing Management of Small Farming System	23I01120703	Nutrition	3	3	24 September 2024

Authority	Developer Lecturer	Course Coordinator	Head of study Program
	Dr. Rinduwati, S.Pt.,MP Prof. Dr. Ir. Budiman Marhamah Nadir, SP., M.Si., Ph.D.	Dr. Rinduwati, S.Pt, MP	Dr. Agr. Ir. Renny Fatmyah Utamy, S. Pt., M. Agr., IPM

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Course Learning Outcomes	**ILOs that are imposed on the course**	
	ILO-3	Mastering concepts and solving animal husbandry problems based on data, science and scientific methods.
	ILO-5	Able to make appropriate decisions in the context of problem solving, based on the results of data and information analysis
	ILO-9	Able to run a livestock entrepreneurship
	ILO⇒ Course Learning Outcomes (CLO)	
	Upon completion of this course, it is expected that:	
	ILO-3	CLO-1 Students are able to analyze the types of grasslands and grazing methods in the tropics.
	ILO-5	CLO-2 Students are able to identify pasture nutrient needs, as well as weed control in pastures.
	ILO-9	CLO-3 Students are able to formulate planning, development, rehabilitation and utilization of pastures.
	CLO⇒ Sub-CLOs	
	CLO 1	Sub-CLO 1: Able to respond to the history of dairy cattle development in foreign countries and in Indonesia. ILO 8 (CLO-1)

		Sub-CLO 2: Able to apply maintenance management on dairy cows (calves, heifers, lactating cows, dry cows, and studs, as well as cull cows (baby beef) and cull studs; dairy buffaloes, dairy goats, and dairy sheep. ILO 7 (CLO-1)
		Sub-CLO 3: Able to analyze diseases that often affect calves, heifers, and adult cattle (infectious diseases, endo- and ecto-parasitic diseases, and metabolic diseases) and their preventive measures. ILO 7 (CLO-1)
		Sub-CLO 4: Able to implement milking management and milk handling and management. ILO 7 (CLO-1)
		Sub-CLO 5: Able to analyze the types of pollution due to dairy livestock waste and how to handle and utilize them. ILO 8 (CLO-1)
		Sub-CLO 6: Able to implement strategies for preparing dairy cattle rations and how to feed them. ILO 7 (CLO-1)
		Sub-CLO 7: Able to organize the institution, layout, and income analysis of dairy cattle business. ILO 8 (CLO-1)

Correlation between ILOs/CLOs to Sub-CLOs

ILOs that are imposed on the course	ILO	SUB CLO	Form Assessment+					Weight	Value	Student Score
			Formative	Summative						
				Quiz	Interactive Lecture	Case Study	Group Paper Assignment	Group Presentation			
ILO-8	0	SUB-CLO-3		11	0	4	0	0	10		
ILO-8	0	SUB-CLO-4		3	0	4	28	15	15		
ILO-8	10	SUB-CLO-5		0	0	8	0	0	10		
ILO-8	0	SUB-CLO-6		0	2.5	0	14	0	5		
ILO-8	0	SUB-CLO-7		2	0	0	0	10	10		
ILO-8	0	SUB-CLO-8		0	0	8	0	10	10		
		SUB-CLO-9		0	0	24	42	10	10		
				7.5	12.5	60	10	10	100		

Course Description	The People's Animal Husbandry Pasture Management course is a compulsory course which is an advanced course after the Feed Pla nt Science course for students of the Bachelor of Animal Husbandry Study Program. This course is presented in the third semester, d iscussing the types of pastures, rehabilitation / development and improvement of pasture fertility, pasture development models, defoliation and past ure ecosystems, carrying capacity, weed control, integration of feed crops with agricultural / plantation / forestry crops.

Learning Materials / Subject Matter	1. Types of pastures and grazing methods 2. Development and rehabilitation of natural pastures 3. Identification of nutrient requirements and soil fertility improvement in pastures 4. Pasture development model 5. Defoliation and PP ecosystem Weed control 6. Stocking rate and tamping capacity 7. Sustainable availability of forage Integration of feed crops with agricultural/plantation/forestry crops
Reference	**Key Reference**
	1. Humphreys, L.R. 1991. Tropical Pasture Utilization. Cambridge University Press, New York and Melbourne 2. Humphreys, L.R. 1981. Environmental Adaptation of Tropical Pasture Plants. Mcmillan Scientific and Medical London. 3. Mannetje, L.'t. 1978. The Role of Improved Pastures for Beef Production in The Tropics. Trop. Grassland 12, 1-9. 4. McILroy, R.J. 1976. Pengantar Budidaya Padang rumput Tropika. Pradnya Paramita, Jakarta. 5. Reksohadiprojo, S. 1994. Produksi Tanaman Hijauan Makanan Ternak Tropik. BFFE, Yogyakarta. 6. Subagyo, I. Dan Kusmartono. 1988. Ilmu Kultur Padangan. Nuffic. Universitas Brawijaya. Malang. 7. Susetyo, S. 1980. Padang Penggembalaan. Departemen Ilmu Makanan Ternak Fakultas Peternakan Institut Pertanian Bogor, Bogor. 8. Susetyo, I. Kismono dan B. Suwardi. 1981. Hijauan Makanan Ternak. Direktorat Jendral Peternakan Departemen Pertanian, Jakarta. 9. Whiteman, P.C. 1980. Tropical Pasture Science. Oxford University Press, London.
	Additional Reference
Teaching Team	Prof. Dr. Ir. Budiman, MP, Dr. Rinduwati, S.Pt., MP, Marhamah Nadir, SP, M.Sc, Ph.D
Course requirements	Grazing Management of Small Farming System

Week	Sub CLO (End ability of each learning stage)	Assesment		Forms and Methods of Learning [time estimate]		Content	Weight of Assesment (%)
		Indicator	Technique & Criteria	Offline	Online		
1	2	3	4	5	6	7	8
1	Able to explain about pasture grazing and its types, as well as grazing methods ()	**Formative:** - **Sumative:** Ability to explain the types of pastures and grazing methods.	**Kriteria** **Formative:** **Kriteria** **Sumative:** Quizzes (5) assessed with rubric I011240004 **Assessment Technique:** Test	**Studying:** Small group discussion, cooperative learning, collaborative learning 1 x 2 x 50		Scope of grazing land Types of pastures that exist in various parts of the world Grazing methods	15
2-3	Able to establish and rehabilitate pastures ()	**Formative:** - **Sumative:** Ability to plan pasture construction and rehabilitation	**Kriteria** **Formative:** **Kriteria** **Sumative:** Interactive Lecture (2) Case Study (15) assessed with rubric I011240002. **Assessment Technique:** Test and Non test	**Studying:** Small group discussion, other methods 2 x 2 x 50		Improvement of grazing management Reseeding or oversowing Pasture construction	15

4-5	Able to improve soil fertility in pasture land (	**Formative:** - **Sumative:** Ability to improve soil fertility in pasture land	**Kriteria** **Formative:** **Kriteria** **Sumative:** Group Paper Assignment (10) **Assessment Technique:** Test and Non Test	**Studying:** Small Group Discussion, Other Methods. 2 x 2 x 50 **Practicum, Studio Practice, Workshop Practice, Field Practice:** Case Study, Collaborative Learning 1 x 1 x 170		Organic fertilization Chemical fertilization Fertilization dosage Fertilization time Fertilization frequency Fertilization frequency	12
6	Able to plan a cropping model in pasture ()	**Formative:** - **Sumative:** Ability to plan cropping model in pasture	**Kriteria** **Formative:** **Kriteria** **Sumative:** Case Study (15) assessed with rubric I011240002 **Assessment Technique:** None	**Studying:** Small group discussion, other methods. 3 x 2 x 50" **Practicum, Studio Practice, Workshop Practice, Field Practice:** Small group discussion, collaborative learning, project-based learning 1 x 2 x 50		Single cropping Mixed cropping Three-strata system	15

9-10	Able to plan the best defoliation ()	**Formative:** - **Sumative:** Ability to organize the best defoliation	**Kriteria** **Formative:** **Kriteria** **Sumative:** Group Presentation (10) assessed with rubric I011240001 **Assessment Technique:** None	**Studying:** Collaborative learning, other methods 1 x 2 x 50 **Practicum, Studio Practice, Workshop Practice, Field Practice:** Case Study, Collaborative Learning, Project-based Learning 1 x 1 x 170		Defoliation frequency Defoliation intensity Defoliation interval Pasture ecosystem (Pustaka: 4, 9, 11, 10, 13, 15)	10
11	Able to perform weed control ()	**Formative:** - **Sumative:** Ability to identify and control weeds	**Kriteria** **Formative:** **Kriteria** **Sumative:** Interactive Lecture (2.5) Quiz (2.5) **Assessment Technique:** None	**Studying:** Collaborative Learning, Project-based Learning, Other Methods. (Project-based Learning), Other methods 1 x 2 x 50"		Physical Biology Chemistry	5

12-13	Able to determine the production and quality of pasture ()	**Formative:** - **Sumative:** Ability to calculate and determine production and quality of pastures	**Kriteria** **Formative:** **Kriteria** **Sumative:** Case Study (10) **Assessment Technique:** None	**Studying:** Small Group Discussion, Other Methods. 2 x 2 x 50 **Practicum, Studio Practice, Workshop Practice, Field Practice:** Case Study, Project-based Learning 1 x 1 x 170		Stocking rate Holding capacity Botanical composition Quality	10
14	Able to plan for sustainable forage availability ()	**Formative:** - **Sumative:** Ability to plan for sustainable forage availability	**Kriteria** **Formative:** **Kriteria** **Sumative:** Case Study (10) assessed with rubric I011240002 **Assessment Technique:** None	**Studying:** I Small group discussion, other methods. 1 x 2 x 50		Feed supplementation in the dry season	10

15-16	Able to determine pasture integration system ()	**Formative:** - **Sumative:** Ability to determine pasture integration system	**Kriteria** **Formative:** **Kriteria** **Sumative:** Case Study (10) assessed with rubric I011240001 **Assessment Technique:** None	**Studying:** Case Study, Collaborative Learning 1 x 2 x 50		Pasture integration with agricultural crops Pasture integration with plantation crops Pasture integration with forestry	10

Matrix ILO, CLO, and Assessment Method

ILO / CLO	CLO-1
ELO-3 (P2)	Quiz (7.5% weight) Interactive Lecture (12.5% weight) Case Study (60% weight) Group Paper Assignment (10% weight) Group Presentation (10% weight)
ELO-5 (KU2)	Quiz (7.5% weight) Interactive Lecture (12.5% weight) Case Study (60% weight) Group Paper Assignment (10% weight) Group Presentation (10% weight)
ELO-9 (KK3)	Quiz (7.5% weight) Interactive Lecture (12.5% weight) Case Study (60% weight) Group Paper Assignment (10% weight) Group Presentation (10% weight)

Evaluation Type and Assessment Weight

Type	Assessment Weight
Quiz	7.5
Interactive Lecture	12.5
Case Study	60
Group Paper Assignment	10
Group Presentation	10
Total	100

Assessment and Evaluation of Student Achievement of CLO

ILOs imposed on the Course	CLO	SUB CLO	Form of Assessment*						Weight	Value	Student Score
			Formative	Sumative							
				Quiz	Interactive Lecture	Case Study	Group Paper Assignment	Group Presentation			
ILO-8	CLO- 1	SUB- CLO-3		11	0	4	0	0	0		
ILO-8	CLO- 1	SUB- CLO-4		3	0	4	28	15	15		
ILO-8	CLO- 1	SUB- CLO-5		0	0	8	0	0	0		
ILO-8	CLO- 1	SUB- CLO-6		0	2.5	0	14	0	0		
ILO-8	CLO- 1	SUB- CLO-7		2	0	0	0	10	10		
ILO-8	CLO- 1	SUB- CLO-8		0	0	8	0	10	10		
		SUB- CLO-9		0	0	24	42	10	10		
				7.5	12.5	60	0	10	10		

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STUDENT STRUCTURED ASSIGNMENT PLAN

COURSE	Grazing Management of Small Farming System				
CODE	23I01120703	**SKS**	3	**SEMESTER**	3 (three)
INSTRUCTOR	Dr. Rinduwati, S.Pt., MP.				

ASSIGNMENT TYPE	**ASSIGNMENT COMPLETION TIME**
Document/Paper	2 Weeks

ASSIGNMENT TITLE

Types of Grasslands and Grazing Methods in Tropical Regions

SUB-LEARNING OUTCOMES OF THE COURSE

Sub-CPMK-1 Able to explain about grazing pastures and their types, as well as grazing methods of grazing: (CPMK-1)

ASSIGNMENT DESCRIPTION

The students' assignment is a group assignment to write a paper on "Grassland Diversity and Grazing Strategies in Tropical Regions." The paper should be written according to the following procedure:

1) Each group chooses 1 of the sub-topics: Diversity of Grasslands and Grazing Strategies in Tropical Regions for 1 group.
2) Discuss among group members to identify the stages of the process for each selected subtopic. Information related to the selected subtopic can be obtained from textbooks and journals.
3) Write the paper with the following structure:
   I. Introduction
   II. Discussion
   III. Conclusion
   IV. References
4) Group Presentation

METHOD OF ASSIGNMENT COMPLETION

1. Conducted in groups using the Small Group Discussion (SGD) learning method

OUTPUT FORMAT AND STRUCTURE

a. Subject: Grasslands, Grazing
b. Output Format: Paper

INDICATORS, CRITERIA, AND WEIGHTING OF ASSESSMENT

Indicators:

1. Systematicity: 10%
2. Accuracy of analysis: 25%
3. Depth of material: 30%
4. Novelty and reputation of reference materials: 10%
5. Team cohesion: 10%
6. Mastery of material: 15%

IMPLEMENTATION SCHEDULE

2 weeks	

OTHER

REFERENCE LIST

1. Humphreys, L.R. 1991. Tropical Pasture Utilization. Cambridge University Press, New York and Melbourne
2. Humphreys, L.R. 1981. Environmental Adaptation of Tropical Pasture Plants. Mcmillan Scientific and Medical London.
3. Mannetje, L.'t. 1978. The Role of Improved Pastures for Beef Production in The Tropics. Trop. Grassland 12, 1-9.
4. McILroy, R.J. 1976. Pengantar Budidaya Padang rumput Tropika. Pradnya Paramita, Jakarta.
5. Reksohadiprojo, S. 1994. Produksi Tanaman Hijauan Makanan Ternak Tropik. BFFE, Yogyakarta.
6. Subagyo, I. Dan Kusmartono. 1988. Ilmu Kultur Padangan. Nuffic. Universitas Brawijaya. Malang. 7.

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Whiteman, P.C. 1980. Tropical Pasture Science. Oxford University Press, London.

Definition of 1 credit hour in LEARNING FORMAT				Hours
A	Lecture, Response, Tutorial			
	Face-to-face	Structured Assignments	Independent Study	
	50 minutes/week/semester	60 minutes/week/semester	60 minutes/week/semester	2.83
B	Seminars or other similar forms of learning			
	Face-to-face		Independent study	
	100 minutes/week/semester		70 minutes/week/semester	2.83
C	Practical training, studio practice, workshop practice, field practice, research, community service, and/or other equivalent forms of learning			
	170 minutes/week/semester			2.83

No	Student Learning Methods	Code
1	Small Group Discussion	SGD
2	Role-Play & Simulation	RPS
3	Discovery Learning	DL
4	Self-Directed Learning	SDL
5	Cooperative Learning	CoL
6	Collaborative Learning	CbL
7	Contextual Learning	CtL
8	Project-Based Learning	PjBL
9	Problem-Based Learning & Inquiry	PBL
10	Or other learning methods that can effectively facilitate the fulfillment of graduate learning outcomes.	