SEMESTER COURSE PLAN (SCP)

GOAT/SHEEP LIVESTOCK PRODUCTION COURSE
(23I01121502)

TEACHING TEAM :

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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 Strategi

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

ILO-2 - Mastering the concepts, theories, and methods of developing effective, efficient, and sustainable livestock (K-01)

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

Course Learning Outcomes (CLO)

CLO-1: Student capable analyze, apply, And implement sheep and goat livestock management (SLO2)

CLO-2: Student capable take decision in a way appropriate in context settlement problems, based on the results of data and information analysis in sheep/goat farming (SLO3)

Sub-CLO

Sub CLO-1: Capable explain system cultivation And history development sheep And goat. (CLO-1)

Sub CLO-2: Capable explain system And model selection sheep And goat (CLO- 1)

Sub CLO-3: Capable designing model pen And system housing on sheep and goats. (CLO-1)

Sub CLO-4: Capable explain model breeding And system reproduction on sheep and goats. (CLO-1)

Sub CLO-5: Able to explain the bioclimatology process of thermoregulation in sheep and goats (CLO-2)

Sub CLO-6: Capable apply technology formulation feed Which needed by sheep and goats. (CLO-1)

Sub CLO-7: Capable explain pattern behavior in demand on sheep And goat. (CLO- 2)

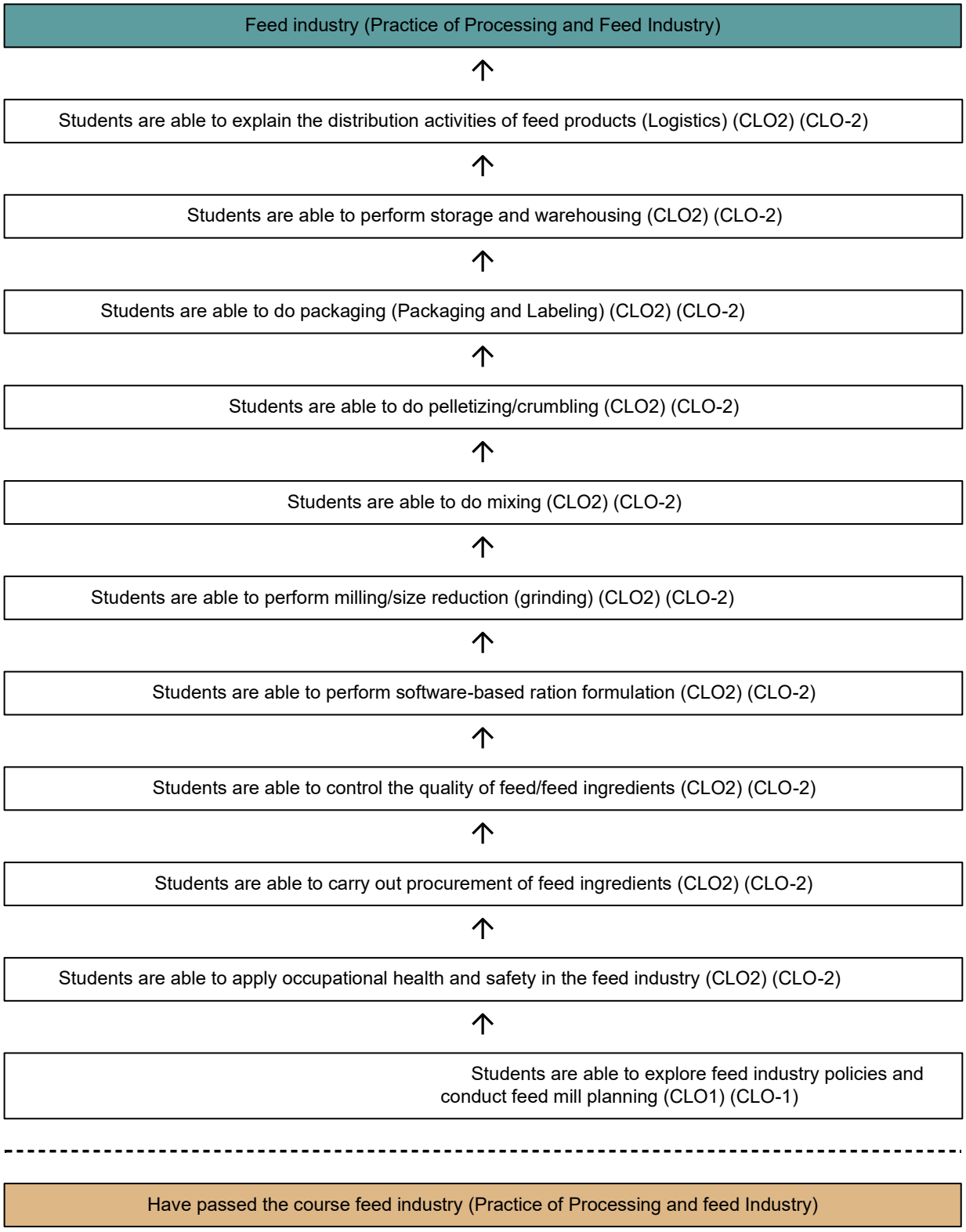
Sub CLO-8: Able to explain carcass parts in sheep and goats. (CLO-1)

Sub CLO-9: Able to explain the division of wool and hair quality in sheep/goats. (CLO-2)

Sub CLO-10: Able to handle and resolve health problems in sheep and goat. (CLO-2)

Sub CLO-11: Capable control technology processing waste goat (CLO- 1)

Learning Analysis



HASANUDDIN UNIVERSITY
FACULTY OF ANIMAL SCIENCE
BACHELOR PROGRAMME IN ANIMAL HUSBANDRY
SEMESTER COURSE PLAN

Course	Code	Course Group	Credits	Semester	Date of Preparation
Goat/sheep Livestock Production	23I01121502		2	4	8 August 2023

	Developer Lecturer	Course Coordinator	Head of study Program
Authority	Prof. Dr. Ir. Muhammad Yusuf, S.Pt., IPU, Prof. Dr. Ir Raden Roro Sri RABugiwati, M.Sc., Dr. Muhammad Ihsan Andi Dagong, S.Pt., M.Si, Dr. Muhammad Hatta, S.Pt., M.Si., Dr. Agr. Ir. Renny Fatmyah Utamy, S. Pt., M. Agr., IPM	Dr. Muhammad Ihsan Andi Dagong, S.Pt., M.Si,	Dr. Agr. Ir. Renny Fatmyah Utamy, S. Pt., M. Agr., IPM

Course Learning Outcomes	**ILOs that are imposed on the course**	
	ILO-	Mastering the concepts, theories, and methods of developing effective, efficient, and sustainable livestock
	ILO-	Mastering the concept and solving livestock problems based on data, science, and scientific methods
	ILO⇒ Course Learning Outcomes (CLO)	
	Upon completion of this course, it is expected that:	
	ILO-	Student capable analyze, apply, And implement management maintenance sheep And goat
	ILO-	CStudent capable take decision in a way appropriate in context settlement problem, based on results analysis data And information on sheep/goat farming

	CLO⇒ Sub-CLOs	
	CLO 1	**SUB-CLO-1:** Capable explain system cultivation And history development sheep And goat.
		SUB-CLO-2: Capable explain system And model selection sheep And goat
		SUB-CLO-3: Capable designing model pen And system housing on sheep And goat.
		SUB-CLO-4: Capable explain model breeding And system reproduction on sheep And goat.
		SUB-CLO-6: Capable apply technology formulation feed Which needed by sheep And goat.
		SUB-CLO-8: Capable explain parts carcass on sheep And goat.
		SUB-CLO-11: Capable control technology processing waste goat
	CLO-2	**SUB-CLO-5:** Capable explain process bioclimatology thermoregulation on sheep And goat
		SUB-CLO-7: Capable explain pattern behavior in demand on sheep And goat.
		SUB-CLO-9: Capable explain distribution quality wool And hair on sheep/goats.
		SUB-CLO-10: Capable handle And finish problem health on sheep And goat.

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						
				Group Presentation	Interactive Lecture	Problem Base Learning	Practicum/Field Practice	Case Study			
SLO- 2	ILO-1	SUB-CLO-1		3	2	0	0	0	5		
SLO- 2	ILO-1	SUB-CLO-2		10	5	0	0	0	15		
SLO- 2	ILO-1	SUB-CLO-3		0	2	13	0	0	15		

SLO- 3	ILO-2	SUB-CLO-5		0	0	5	0	0	5		
SLO- 2	ILO-1	SUB-CLO-6		0	0	10	0	0	10		
SLO- 3	ILO-2	SUB-CLO-7		0	3	0	7	0	10		
SLO- 2	ILO-1	SUB-CLO-8		0	5	0	5	0	10		
SLO- 3	ILO-2	SUB-CLO-9		0	0	0	5	0	5		
SLO- 3	ILO-2	SUB-CLO-10		0	3	0	7	5	15		
SLO- 2	ILO-1	SUB-CLO-11		0	0	10	0	0	10		
				13	**20**	**38**	**24**	**5**	**100**		

Course Description	This course discusses goat and sheep farming technology, goat/sheep business prospects, maintenance management, feeding, reproduction, waste management and utilization, and feasibility studies for goat/sheep farming businesses.
Learning Materials / Subject Matter	1. History development sheep And goat in overseas country And in Indonesia; as well as technology cultivation sheep/goats in Indonesia. 2. System And model selection on sheep And goat 3. Management maintenance child goat (kidding management) 4. System breeding (arrangement marriage) And reproduction on sheep And goat 5. Model pen And system housing on sheep And goat 6. Process bioclimatology thermoregulation on sheep And goat 7. Need nutrition And formulation feed Which needed by sheep And goat 8. Pattern behavior in demand on sheep And goat 9. Parts carcass on sheep And goat 10. Handling Health on sheep And goat (basic health care and disease prevention) 11. Production wool And hair (cashmere) And distribution the quality 12. Handling waste sheep And goat
Reference	**Key Reference**
	1. Christie Peacock. Improving Goat Production in the Tropics. Oxfarm. 1996 2. Sandra G. Solomon. Goat Science and Production. Wiley Blackwell. 2010 3. Barbara Vincent. Farming Meat Goats. (Breeding, Production and Marketing). CSIRO Publishing. 2018 4. Goat Production manual. Second Edition.

	Additional Reference
	1. Dairy goat production. 2022. PennState Extension. 2. Miller B and You. CD 2019. Current status of global dairy goat production: an overview. Asian Australasian journal of Animal Science. 2019. 32 (8) : 1219- 1232 .
Teaching Team	Prof. Dr. Ir. Muhammad Joseph, S.Pt., IPU, Prof. Dr. Ir Raden Roro Sri RA Bugiwati, M.Sc., Dr. Muhammad Ihsan Andi Dagong, S.Pt., M.Sc, Dr. Muhammad Even, S.Pt.,M.Sc., Dr. Agr. Ir. Renny Fatmyah Utamy, S. Pt., M. Agr., HDI
Course requirements	Goat/Sheep Livestock Production Course

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 the cultivation system and history of development sheep and goats. (CLO-1)	**Formative:** - **Summative:** Understanding of learning contacts and forms of learning that implemented in the learning process, as well as assessment criteria	**Formative Criteria : Summative** **Criteria:** Interactive Lecture(2) Presentation Group (3) assessed using rubric I011240001 **Assessment Techniques:** None	**Studying:** Small Group Discussion , Collaborative Learning 1 x 2 x 50'		History development sheep And goat in overseas country And in Indonesia; as well as technology cultivation sheep/goats in Indonesia.	5
2- 3	Able to explain the sheep livestock selection system and model And goat (CLO-1)	**Formative:** - **Summative:**	**Formative Criteria : Summative** **Criteria:** Interactive	**Studying:** Small Group Discussion , Collaborative Learning		System And model selection on sheep And goat	15

		Completeness explanation of the system and model of sheep and goat livestock selection	Lecture (5) Presentation Group (10) assessed with rubric I011240001 **Assessment Techniques:** None	1 x 2 x 50' **Practicum, Studio Practice, Practice Workshop, Field Practice:**			
4- 5	Able to design cage models and cage systems for sheep farming And goat. (CLO-1)	**Formative:** - **Summative:**	**Formative Criteria** **: Summative** **Criteria:** Problem Base Learning (13) assessed with rubric I011240003	**Studying:** Small Group Discussion , Collaborative Learning 1 x 2 x 50'		Management maintenance child goat (kidding management)	15
6	Able to explain bioclimatology processes thermoregulation in sheep and goats (CLO-2)	**Formative:** - **Summative:**	**Formative Criteria** **: Summative** **Criteria:** Problem Base Learning (5) assessed with rubric I011240003	**Studying:** Small Group Discussion , Collaborative Learning 1 x 2 x 50'		System breeding (arrangement marriage) And reproduction on sheep And goat	5
7	Capable apply required feed formulation technology by sheep and goats. (CLO-1)	**Formative:** - **Summative:** Completeness explanation of feed formulation technology and	**Formative Criteria** **: Summative** **Criteria:** Problem Base Learning (10) assessed with rubric I011240003 **Assessment**	**Studying:** Small Group Discussion , Collaborative Learning 1 x 2 x 50'		Model pen And system housing on sheep And goat	10

		nutritional requirements for goat livestock	**Techniques:** None				
8- 9	Able to explain behavioral patterns in livestock sheep And goat. (CLO-2)	**Formative:** -	**Formative Criteria** **: Summative** **Criteria:** Studying Interactive (3)	**Studying:** Learning collaborative learning		1. Process bioclimatology thermoregulation on sheep And goat 2. Need nutrition And formulation feed Which needed by sheep And goat	10
10	Able to explain the carcass parts of sheep And goat. (CLO-1)	**Formative:** - **Summative:** Completeness explanation of carcass parts in dombing	**Formative Criteria** **: Summative** **Criteria:** Interactive Lecture (5) Practicum/Field practice(5) assessed with rubric I011240002 **Assessment** **Techniques:**	**Studying:** Small Group Discussion , Collaborative Learning 1 x 2 x 50'		Pattern behavior in demand on sheep And goat	10
11	Able to explain division quality wool and hair on sheep/goats. (CLO-2)	**Formative:** - **Summative:** Complete explanation of	**Formative Criteria** **: Summative** **Criteria:** Practicum/Field practice(5) assessed with rubric I011240002	**Studying:** Small Group Discussion , Collaborative Learning 1 x 2 x 50'		Parts carcass on sheep And goat	5

		division quality wool and hair on the sheepskin	**Assessment Techniques:** None				
12- 13	Able to handle and resolve health problems on sheep and goats. (CLO-2)	**Formative:** - **Summative:**	**Formative Criteria : Summative Criteria:** Case Study (5) assessed with rubric I011240003	**Studying:** Learning collaborative learning 1 X 2 X 50		Handling Health on sheep And goat (basic health care and disease prevention)	5
14- 15	Able to handle and resolve health problems on sheep and goats. (CLO-2)	**Formative:** - **Summative:** Able to handle problems in kidding management	**Formative Criteria : Summative Criteria:** Interactive Lecture (3) Practicum/Field practice(7) assessed with rubric I011240002 **Assessment Techniques:** None	**Studying:** Small Group Discussion , Collaborative Learning 1x20x50 **Practicum, Studio Practice, Practice Workshop, Field Practice:**		Production wool And hair (cashmere) And distribution the quality	10
16	Capable control goat waste processing technology (CLO-1)	**Formative:** -	**Formative Criteria :** **Summative Criteria:**	**Studying:** Learning collaborative		Handling waste sheep And goat	10

		Summative:	Problem Base Learning (10) assessed with rubric I011240003	learning 1x20x50			
							100

Matrix ILO, CLO, and Assessment Method

ILO / CLO	CLO-1
IILO-2 (P1)	Interactive Lecture (Weight 2%) Group Presentation (Weight 3%) Interactive Lecture (Weight 5%) Group Presentation (Weight 10%) Problem Base Learning (Weight 13%) Interactive Lecture (Weight 2%) Problem Based Learning (Weight 10%) Interactive Lectures (Weight 5%) Practicum/Exercis Roomy (Weight 5%) Problem Based Learning (Weight10%)
ILO-3 (P2)	Problem Based Learning (Weight 5%) Interactive Lectures (Weight 3%) Practicum/Exercise Roomy (Weight 7%) Practicum/Field practice(Weight 5%) Case Study (Weight 5%) Studying Interactive (Weight 3%) Practicum/Field practice(Weight 7%)

Evaluation Type and Assessment Weight

Type	Assessment Weight
Studying Interactive	20
Presentation Group	13
Problem Base Learning	38
Practicum/Internship Roomy	24
Case Study	5
Total	100

Assessment and Evaluation of Student Achievement of CLO

ILOs that are imposed on the course	ILO	SUB CLO	Form Assessment+						Weight	Value	Student Score
			Formative	Summative							
				Group Presentation	Interactive Lecture	Problem Base Learning	Practicum/Field Practice	Case Study			
SLO- 2	ILO- 1	SUB-CLO- 1		3	2	0	0	0	5		
SLO- 2	ILO- 1	SUB-CLO- 2		10	5	0	0	0	15		
SLO- 2	ILO- 1	SUB-CLO- 3		0	2	13	0	0	15		
SLO- 3	ILO- 2	SUB-CLO- 5		0	0	5	0	0	5		
SLO- 2	ILO- 1	SUB-CLO- 6		0	0	10	0	0	10		
SLO- 3	ILO- 2	SUB-CLO- 7		0	3	0	7	0	10		
SLO- 2	ILO- 1	SUB-CLO- 8		0	5	0	5	0	10		
SLO- 3	ILO- 2	SUB-CLO- 9		0	0	0	5	0	5		
SLO- 3	ILO- 2	SUB-CLO- 10		0	3	0	7	5	15		
SLO- 2	ILO- 1	SUB-CLO- 11		0	0	10	0	0	10		

	HASANUDDIN UNIVERSITY **FACULTY OF ANIMAL SCIENCE** **BACHELOR PROGRAMME IN ANIMAL HUSBANDRY**

STUDENT STRUCTURED ASSIGNMENT PLAN

Course	Goat/sheep Livestock Production				
Code	23I01121502	**Credits**	2	**Semester**	4 (Empat)
Developer Lecturer	Dr. Muhammad Ihsan Andi Dagong, S.Pt., M.Si				

Task Form	**Task Time**
Documents/Magazines	2 Week

Task Title

Able to apply maintenance management to 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.

Course Learning Outcomes

SLO- 2 : Student capable analyze, apply, And implement management maintenance sheep And goat
SLO- 3 : Student capable take decision in a way appropriate in context settlement problem, based on results analysis data And information on sheep/goat farming

Task Description

The student's assignment is a group task to make a Paper Assignment "Dairy Livestock Maintenance Management" by choosing 1 of the sub-topics: Dairy Cattle, Dairy Buffalo, Dairy Goats, and Dairy Sheep The preparation of the paper follows the following procedure:

1) Each group chooses 1 of the sub-topics for 1 group.
2) Discuss among the group members to identify the process stages for each of the selected sub-topics. Information related to the selected sub-topic can be obtained from textbooks and journals.
3) Create a paper with the following systematics:
   I. Introduction
   II. Discussion
   III. Conclusion
   IV. Literature
   V. Group presentation

Assignment Method

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

Form and Format of Output

a. Object of Cultivation: Dairy Livestock

b. Form of Output: Paper

Indicators, Criteria and Assessment Weight

Indicators:

1. Systematics: 10%
2. Accuracy of analysis: 25%
3. Depth of material: 30%
4. Novelty and reputation of library materials: 10%
5. Team cohesiveness: 10%
1. Mastery of the material: 15%

Implementation Schedule	
2 Weeks	

Other
-

Reference List

1. Dike IP. 2009. Efficiency of intracellular cryoprotectants on the cryopreservation of sheep oocytes by controlled slow freezing and vitrification techniques. *J. Cell Anim. Biol.* 3 (3): 044-049
2. Edashige K, Kasai M. 2007. The movement of water and cryoprotectants in mammalian oocytes and embryos and its relevance to cryopreservation (A Review). *J. Mamm. Ova. Res*. 24:18-22
3. Garg N, Purohit GN. 2007. Effect of different cryoprotectant concentrations for ultrarapid freezing of immature goat follicular oocytes on their subsequent maturation and fertilization *in vitro*. *Anim. Reprod*. 4(3/4): 113-118
4. Gasparrini B *et al*. 2007. Cryopreservation of in vitro matured buffalo (Bubalus bubalis) oocytes by minimum volumes vitrification methods. *Anim. Reprod. Sci.* 98: 335–342
5. Jain JK, Paulson RJ. 2006. Oocyte cryopreservation. *Fertil. Steril.* 86 Suppl 3: 1037-1046
6. Mavrides A, Morrol D. 2002. Cryopreservation of bovine oocytes: is cryoloop vitrification the future to preserving the female gamete. *Reprod. Nutr. Dev.* 42: 73–80
7. Sharma GT, Kharche SD, Majumdar AC. 2006. Vitrification of in vitro matured goat oocytes and the effect on in vitro fertilization. *Small Rum. Res.* 64: 82–86
8. Saragusty J, Arav A. 2011. Current progress in oocyte and embryo cryopreservation by slow freezing and vitrification (A Review). *Reproduction* 141: 1–19

DEFINITION OF 1 CREDIT IN THE FORM OF LEARNING				Time
A	Lecture, Reception, Tutorial			
	Face to Face	Penugasan Terstruktur	Belajara Mandiri	
	50 minutes/week/semester	60 menit/minggu/semester	60 menit/minggu/semester	2,83
B	Seminars or other similar forms of learning			
	Face to face		Belajar mandiri	
	100 minutes/week/semester		70 menit/minggu/semester	2,83
C	Practicum, studio practice, workshop practice, field practice, research, community service, and/or other equivalent forms of learning			
	170 minutes/week/semester			2,83

No	Metode Pembelajaran Mahasiswa	Kode
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, which can effectively facilitate the fulfillment of graduate learning outcomes.	