

SEMESTER COURSE PLAN (SCP)

**ANIMAL NUTRITION
(23101110903)**



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 Strategic

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

ILO-7 (KK1) - Able to apply livestock science and technology that is oriented towards increasing production, efficiency, quality and sustainability (SS-01).

Course Learning Outcomes (CLO)

CLO-1: Able to analyze the types, sources, needs and utilization of macro nutrients by livestock

CLO- 2: Able to analyze the needs and utilization of micro nutrients by livestock

CLO-3: Able to analyze the process of digestion, absorption and metabolism of nutrients in livestock

CLO-4: Able to determine the level of nutritional needs of livestock based on the physiological status of livestock

Sub-CLO

Sub-CLO 2: Able to classify and analyze the chemical composition, function and measurement methods of carbohydrates in feed for livestock

Sub-CLO 3: Able to classify and analyze the chemical composition, function and measurement methods of protein in feed for livestock

Sub-CLO 4: Able to classify and analyze the chemical composition, function and measurement methods of fat in feed for livestock

Sub CLO-5: Able to analyze the classification, function and role of vitamins for livestock

Sub CLO-6: Able to analyze the classification of the function and content of feed minerals

Sub-CLO 7: Able to analyze various types and forms as well as the use of feed additives for livestock

Sub-CLO 8: Able to analyze the process of digestion, absorption, and metabolism of nutrients in livestock

Sub CLO-9: Able to determine and analyze livestock nutritional needs for various functions: basic life, production, reproduction, and lactation

Learning Analysis

Animal Nutrition Science



Able to determine and analyze the nutritional needs of livestock for various functions: basic life, production,



Able to analyze the process of digestion, absorption, and metabolism of nutrients in



Able to analyze various types and forms as well as the use of feed additives for livestock ()



Able to analyze the classification of the function and content of feed minerals ()



Able to analyze the classification, function and role of vitamins for livestock ()



Able to classify and analyze the chemical composition, function and measurement method of fat in feed for livestock ()



Able to classify and analyze the chemical composition, function and measurement methods of protein in feed for livestock ()



Able to classify and analyze the chemical composition, functions and measurement methods of carbohydrates in feed



Able to analyze the chemical components that make up the body of animals and plants ()





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

Course	Code	Course Group	Credit Points	Semester	Date of Preparation
Animal Nutrition	23101110903	Animal Nutrition and Diet	3	2	27 August, 2023
Authority	Developer Lecturer		Course Coordinator		Head of study Program
	Prof. Dr. Ir. Ismartoyo, M.Agr.S. Prof. Dr. Ir. Asmuddin Natsir, M.Sc. Dr. Ir. Syahriani, M.Si. Dr. A. Mujnisa, S.Pt., MP. Dr. Fahrul Irawan, S.Pt., M.Si., Ph.D Dr. Ismah Ulfiyah Aziz, S.Pt., M.Sc.		Prof. Dr. Ir. Asmuddin Natsir, M.Sc.		Dr. Agr. Ir. Renny Fatmyah Utamy, S. Pt., M. Agr., IPM
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-7	Able to apply animal science and technology that is oriented towards increasing production, efficiency, quality and sustainability.			
	ILO⇒ Course Learning Outcomes (CLO)				
	Upon completion of this course, it is expected that:				
	CLO-1	Able to analyze the types, sources, needs and utilization of macro nutrients by livestock			
	CLO-2	Able to analyze the needs and utilization of micro nutrients by livestock ()			
	CLO-3	Able to analyze the process of digestion, absorption and metabolism of nutrients in livestock			
	CLO-4	Able to determine the level of nutritional needs of livestock based on the physiological status of livestock			
	CLO⇒ Sub-CLOs				

	SUB-CLO-2	Able to classify and analyze the chemical composition, function and measurement methods of carbohydrates in feed for livestock
	SUB-CLO-3	Able to classify and analyze the chemical composition, function and measurement methods of protein in feed for livestock
	SUB-CLO-4	Able to classify and analyze the chemical composition, function and measurement methods of fat in feed for livestock
	SUB-CLO-5	Able to analyze the classification, function and role of vitamins for livestock
	SUB-CLO-6	Able to analyze the classification of the function and content of feed minerals
	SUB-CLO-7	Able to analyze various types and forms as well as the use of feed additives for livestock
	SUB-CLO-8	Able to analyze the process of digestion, absorption, and metabolism of nutrients in livestock
	SUB-CLO-9	Able to determine and analyze livestock nutritional needs for various functions: basic life, production, reproduction, and lactation

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					
				Task Paper Individual	Practicum/Field Practice	Quiz			
ILO-	CLO-	SUB-CLO-1	Attendance, activeness, participation in class and lab	5	5	0	10		
ILO-	CLO-	SUB-CLO-2	Attendance, activeness, participation in class and laboratory	5	5	2.5	12.5		
ILO-	CLO-	SUB-CLO-3	Attendance, activeness, participation in class and lab	5	5	2.5	12.5		
ILO-	CLO-	SUB-CLO-4	Attendance, activeness, participation in class and lab	5	5	2.5	12.5		
ILO-	CLO-	SUB-CLO-5	Attendance, activeness, participation in class	5	0	2.5	7.5		
ILO-	CLO-	SUB-CLO-6	Attendance, activeness, participation in class and lab.	5	5	2.5	12.5		
ILO-	CLO-	SUB-CLO-7	Attendance, activeness, class participation	5	0	2.5	7.5		
ILO-	CLO-	SUB-CLO-8	Attendance, activeness, participation in class	7.5	0	7.5	15		
ILO-	CLO-	SUB-CLO-9	Attendance, activeness, participation in class	5	0	5	10		

		47.5	25	27.5	100	
Course Description	The Animal Nutrition course is a compulsory course for students of the Faculty of Animal Science. This course is presented in the third semester in the Animal Husbandry Study Program, discussing the chemical components of animal and plant bodies (feed), methods of analyzing the chemical components of feed, methods of determining the nutritional value of feed (digestion coefficient), and determining animal nutritional needs based on the type of nation and physiological conditions of livestock. This course is important as a foundation for taking further courses in the field of animal nutrition.					
Learning Materials / Subject Matter	<ol style="list-style-type: none"> 1. Chemical components that make up the body of animals and plants 2. Macro nutrient: carbohydrate, protein, fat 3. Micro nutrients for livestock: vitamins, minerals, feed additives 4. Digestion, absorption and metabolism of nutrients 5. Nutrient requirements for basic survival, production, reproduction and lactation 					
Reference	Key Reference					
	<ol style="list-style-type: none"> 1. Asmuddin Natsir, et al., 2013. Buku Ajar: Ilmu Nutrisi Ternak. Universitas Hasanuddin. 2. McDonald, Edwards, Greenhalg, Morgan, 2010. Animal Nutrition. 7th Ed. Longman Scientific & Technical. John Wiley and Sons, Inc, New York. . 3. Lassiter, J.W. and H.M. Edwards, Jr. 1982. Animal Nutrition. Restong Publishing Company, Virginia. 4. Scientific Journals, such as Journal of Animal Science, Asian Australasian Journal of Animal Science, Animal Feed Science and Technology 5. Agustina, L., dan S. Purwanti. 2012. Nutrisi Unggas. Rumah Pengetahuan, Yogyakarta. 6. Anonim. 2020. Feed Additive Compendium 2020. A guide to use of drugs is medicated animal feeds. Feedstuff, Washington 7. Larbier, M. and Leclercq, B. 1994. Nutrition and Feeding of Poultry. Nottingham University Press. UK. 8. Klasing, K.C. 2002. Comparative Avian Nutrition. CAB International 9. Leeson, S. and Summers J.D. 2005. Commercial Poultry Nutrition. Third Edition. University Books. Canada 10. Piliang, dkk. 2006. Nutrisi Vitamin I. IPB Press 11. Piliang, dkk. 2006. Nutrisi Vitamin II. IPB Press 12. Piliang, dkk. 2006. Nutrisi Mineral. IPB Press 					
	Additional Reference					
	Scholars, Youtube					

Teaching Team		Prof. Dr. Ir. Ismartoyo, M.Agr.S Prof. Dr. Ir. Asmuddin Natsir, M.Sc. Dr. Ir. Syahrani, M.Si. Dr. A. Mujnisa, S.Pt., MP Dr. Fahrul Irawan, S.Pt., M.Si., Ph.D. Dr. Ismah Ulfiyah Azis, S.Pt., M.Sc.					
Course requirements		Animal Nutrition					
Week	Sub CLO (End ability of each learning stage)	Assesment		Forms and Methods of Learning [time estimate]		Learning Material (Content)	Assessment Weight (%)
		Indicator	Technique & Criteria	Offline	Online		
1	2	3	4	5	6	7	8
1	Able to analyze the chemical components that make up the body of animals and plants ()	Formative: Participation Sumative: Accuracy and completeness in understanding the RPS and material on the chemical components that make up the body of animals and plants.	Criteria Formative: Attendance, activeness, participation in class and lab Criteria Sumative: Task Paper Individual (5) Practicum/Field Practice (5) Assessment Technique: Test and Non-Test	Studying: Other methods 1 x 2 x 50 Practicum, Studio Practice, Workshop Practice, Field Practice: Case Study 1 x 1 x 170 minutes Studying: Self-Directed Learning Structured Assignment (Individual) 1 x 2 x 60 minutes		1. Studying contract, RPS, CLO 2. Devlopment of livestock nutrition science 3. Chemical Composition of animal and plant bodies	10

2-3	Able to classify and analyze the chemical composition, function and measurement methods of carbohydrates in feed for livestock ()	<p>Formative: Participation</p> <p>Sumative: The accuracy of classifying and analyzing the chemical composition, function and measurement methods of carbohydrates in feed for livestock.</p>	<p>Criteria Formative: Attendance, activeness, participation in class and lab</p> <p>Criteria Sumative: Quiz (2.5) Task Paper Individual (5) Practicum/Field Practice (5)</p> <p>Assessment Technique: None</p>	<p>Studying: Other methods 2 x 2 x 50 Practicum, Studio Practice, Workshop Practice, Field Practice: Case Study 2 x 1 x 170 minutes Studying: Self-Directed Learning Restructure Assignment (Individual) 2 x 2 x 60 minutes</p>		<ol style="list-style-type: none"> 1. Definition of carbohydrate 2. Chemical composition of carbohydrates 3. Classification of carbohydrates 4. Function and role of carbohydrates 5. Sources of KH for livestock 6. Measurement of crude fiber contents of feed ingredients 	12.5
4-5	Able to classify and analyze the chemical composition, function and measurement methods of protein in feed for livestock ()	<p>Formative: Participation</p> <p>Sumative: The accuracy of classifying and analyzing the chemical composition, function and measurement methods of protein in feed ingredients.</p>	<p>Criteria Formative: Attendance, activeness, participation in class and lab</p> <p>Criteria Sumative: Quiz (2.5) Task Paper Individual (5) Practicum/Field Practice (5)</p> <p>Assessment Technique: None</p>	<p>Studying: Other methods interactive Studying 2 x 2 x 50 minutes Practicum, Studio Practice, Workshop Practice, Field Practice: Case Study 2 x 1 x 170 minutes Studying: Self-Directed Learning Restructure Assignment (Individual) 2 x 2 x 60 minutes</p>		<ol style="list-style-type: none"> 1. Definition and understanding of protein 2. Chemical composition of protein 3. Classification of amino acids as constituents of proteins 4. The function and role of protein for livestock 5. Sources of KH for livestock 6. Measurements of feed protein content 	12.5

6-7	Able to classify and analyze the chemical composition, function and measurement methods of fat in feed for livestock ()	<p>Formative: Participation</p> <p>Sumative: Completeness and accuracy in classifying and analyzing the chemical composition, function and measurement methods of fat in feed ingredients.</p>	<p>Criteria Formative: Attendance, activeness, participation in class and lab</p> <p>Criteria Sumative: Quiz (2.5) Task Paper Individual (5) Practicum/Field Practice (5)</p> <p>Assessment Technique: None</p>	<p>Studying: Other methods interactive Studying 2 x 2 x 50 minutes</p> <p>Practicum, Studio Practice, Workshop Practice, Field Practice: Case Study 2 x 1 x 170 minutes</p> <p>Studying: Self-Directed Learning Restructure Assignment (Individual) 2 x 2 x 60 minutes</p>		<ol style="list-style-type: none"> 1. Definition and definition of fat 2. Chemical composition of fat 3. Classification of fatty acids 4. Function and role of fat for livestock 5. Sources of fat for livestock 6. Measurement of feed fat content 	12.5
8	Able to analyze the classification, function and role of vitamins for livestock ()	<p>Formative: Participation</p> <p>Sumative: Completeness and accuracy in analyzing the classification, function and role of vitamins for livestock.</p>	<p>Criteria Formative: Attendance, engagement, class participation</p> <p>Criteria Sumative: Quiz (2.5) Task Paper Individual (5)</p>	<p>Studying: Other methods interactive Studying 1 x 2 x 50 minutes</p> <p>Studying: Self-Directed Learning Structured Assignment (Individual) 1 x 2 x 60 minutes</p>		<ol style="list-style-type: none"> 1. Classification of vitamins based on solubility in water and in fat 2. The function and role of vitamins for livestock 3. Impact of vitamin deficiency 	7.5

			Assessment Technique: None				
9-10	Able to analyze the classification of the function and content of feed minerals ()	<p>Formative:</p> <p>Participation</p> <p>Sumative:</p> <p>Accuracy and completeness in analyzing the function classification and measurement methods of feed mineral content.</p>	<p>Criteria Formative:</p> <p>Attendance, activeness, participation in class and lab</p> <p>Criteria Sumative:</p> <p>Quiz (2.5) Task Paper Individual (5) Practicum/Field Practice (5)</p> <p>Assessment Technique:</p> <p>None</p>	<p>Studying:</p> <p>Other methods interactive</p> <p>Studying 1 x 2 x 50 minutes</p> <p>Studying:</p> <p>Self-Directed Learning</p> <p>Structured Assignment (Individual) 1 x 2 x 60 minutes</p>		<ol style="list-style-type: none"> 1. Classification of minerals: macro and micro 2. Role and function of minerals of livestock 3. Impact of mineral deficiency 4. Mineral sources 5. Methods of measuring ash content in feed 	12.5

11	Able to analyze various types and forms as well as the use of feed additives for livestock ()	<p>Formative: Participation</p> <p>Sumative: Accuracy in analyzing the various types and forms and uses of feed additives for livestock.</p>	<p>Criteria Formative: Attendance, activeness, participation in class and lab</p> <p>Criteria Sumative: Quiz (2.5) Task Paper Individual (5) Practicum/Field Practice (5)</p> <p>Assessment Technique: None</p>	<p>Studying: Other methods interactive Studying 1 x 2 x 50 minutes</p> <p>Studying: Self-Directed Learning Structured Assignment (Individual) 1 x 2 x 60 minutes</p>		<ol style="list-style-type: none"> 1. Types of feed additives 2. Utilization of feed in rations 3. Role and function of feed additives 	7.5
12-14	Able to analyze the process of digestion, absorption, and metabolism of nutrients in livestock ()	<p>Formative: Participation</p> <p>Sumative: Completeness and accuracy in analyzing the process of digestion, absorption, and metabolism. nutrition in livestock.</p>	<p>Criteria Formative: Attendance, engagement, class participation</p> <p>Criteria Sumative: Quiz (2.5) Task Paper Individual (5)</p> <p>Assessment Technique: None</p>	<p>Studying: Other methods interactive Studying 3 x 2 x 50 minutes</p> <p>Studying: Self-Directed Learning Structured Assignment (Individual) 3 x 2 x 60 minutes</p>		<ol style="list-style-type: none"> 1. Principles of digestion in ruminant and non-ruminant 2. Methods of measuring digestibility 3. Absorption of nutrients 4. Nutrient metabolism 	15

15-16	Able to determine and analyze the nutritional needs of livestock for various functions: basic life, production, reproduction, and lactation ()	<p>Formative:</p> <p>Participation</p> <p>Sumative:</p> <p>Thoroughness and completeness in determining and analyzing the nutritional requirements of livestock for various functions: basic survival, production, reproduction, and lactation.</p>	<p>Criteria</p> <p>Formative:</p> <p>Attendance, engagement, class participation</p> <p>Criteria</p> <p>Sumative:</p> <p>Quiz (5)</p> <p>Task Paper Individual (5)</p> <p>Assessment Technique:</p> <p>None</p>	<p>Studying:</p> <p>Other methods interactive</p> <p>Studying</p> <p>2 x 2 x 50 minutes</p> <p>Studying:</p> <p>Self-Directed Learning</p> <p>Structured Assignment (Individual)</p> <p>2 x 2 x 60 minutes</p>		Nutritional needs of livestock for various functions: basic life, production, reproduction, and lactation	10
							100

Matrix ILO, CLO, and Assessment Method

	ILO/CLO
	ILO-3 (P2)
	ILO-7 (KK1)

Evaluation Type and Assessment Weight

Type	Assessment Weight
Task Paper Individual	47.5
Practicum/Fields Practice	25
Quiz	27.5
Total	100

Assessment and Evaluation of Student Achievement of CLO

SLOs that are charged on the Course	CLO	SUB CLO	Form of Assessment [*]				Weight	Value	Student Score
			Formative	Summative					
				Task Paper Individual	Practicum/Field Practice	Quiz			
SLO-	CLO-	SUB-CLO-1	Attendance, activeness, participation in class and lab	5	5	0	10		
SLO-	CLO-	SUB-CLO-2	Attendance, activeness, participation in class and laboratory	5	5	2.5	12.5		
SLOS-	CLO-	SUB-CLO-3	Attendance, activeness, participation in class and lab	5	5	2.5	12.5		
SLO-	CLO-	SUB-CLO-4	Attendance, activeness, participation in class and lab	5	5	2.5	12.5		
SLOS-	CLO-	SUB-CLO-5	Attendance, activeness, participation in class	5	0	2.5	7.5		
SLOS-	CLO-	SUB-CLO-6	Attendance, activeness, participation in class and lab.	5	5	2.5	12.5		
SLO-	CLO-	SUB-CLO-7	Attendance, activeness, participation in class	5	0	2.5	7.5		
SLO-	CLO-	SUB-CLO-8	Attendance, activeness, participation in class	7.5	0	7.5	15		
SLO-	CLO-	SUB-CLO-9	Attendance, activeness, participation in class	5	0	5	10		
				47.5	25	27.5	100		



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

STUDENT STRUCTURED ASSIGNMENT PLAN

Course	Animal Nutrition				
Code	23101110903	Credit Points	3	Semester	2 (dua)
Developer Lecturer	Prof. Dr. Ir. Asmuddin Natsir, M.Sc.				
Task Form		Task Time			
Documents/Magazines		2 Weeks			
Task Title					
Analyzing and Measuring Carbohydrates in Feed: Definition and Chemical Composition of Carbohydrates, Classification, Functions and Roles of Carbohydrates, Measurement of Crude Fiber Content in Feed Ingredients					
Course Learning Outcomes					
Sub-CLO-1 Able to clarify and analyze the chemical composition, function, and measurement methods of carbohydrates in animal feed.					
Task Description					
<p>The students' assignment is a group project to write a paper titled "Analyzing and Measuring Carbohydrates in Feed" by choosing one of the following subtopics: Definition and Chemical Composition of Carbohydrates, Classification, Functions and Roles of Carbohydrates, Measurement of Crude Fiber Content in Feed. The paper should be written according to the following procedure:</p> <ol style="list-style-type: none">1) Each group chooses 1 of the sub-topics: Definition and Chemical Composition of Carbohydrates, Classification, Functions and Roles of Carbohydrates, Measurement of Crude Fiber Content in Feed Materials 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:<ol style="list-style-type: none">I. IntroductionII. DiscussionIII. ConclusionIV. Literature4) 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: Nutrition and animal feed b. Form of Output: Paper					
Indicators, Criteria and Assessment Weight					
<p>Indicators:</p> <ol style="list-style-type: none">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%6. Mastery of the material: 15%					
Implementation Schedule					

2 weeks	
Other	
-	
Reference List	
<ol style="list-style-type: none"> 1. Asmuddin Natsir, et al., 2013. Buku Ajar: Ilmu Nutrisi Ternak. Universitas Hasanuddin. 2. McDonald, Edwards, Greenhalg, Morgan, 2010. Animal Nutrition. 7th Ed. Longman Scientific & Technical. John Wiley and Sons, Inc, New York. 3. Lassiter, J.W. and H.M. Edwards, Jr. 1982. Animal Nutrition. Restong Publishing Company, Virginia. 4. Scientific Journals, such as Journal of Animal Science, Asian Australasian Journal of Animal Science Animal Feed Science and Technology 5. Agustina, L., dan S. Purwanti. 2012. Nutrisi Unggas. Rumah Pengetahuan, Yogyakarta. 6. Anonim. 2020. Feed Additive Compendium 2020. A guide to use of drugs is medicated animal feeds. Feedstuff, Washington 7. Larbier, M. and Leclercq, B. 1994. Nutrition and Feeding of Poultry. Nottingham University Press. UK. 8. Klasing, K.C. 2002. Comparative Avian Nutrition. CAB International 9. Leeson, S. and Summers J.D. 2005. Commercial Poultry Nutrition. Third Edition. University Books. Canada 10. Piliang, dkk. 2006. Nutrisi Vitamin I. IPB Press 11. Piliang, dkk. 2006. Nutrisi Vitamin II. IPB Press 12. Piliang, dkk. 2006. Nutrisi Mineral. IPB Press 	

DEFINITION OF 1 CREDIT IN THE FORM OF LEARNING			Time
A	Lecture, Reception, Tutorial		
	Face to Face	Structured Assignment	Independent Learning
	50 minutes/week/semester	60 minutes/week/semester	60 minutes/week/semester
	Seminars or other similar forms of learning		
B	Face to face	Self-study	
	100 minutes/week/semester	70 minutes/week/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	Atau metode pembelajaran lain, yang dapat secara efektif memfasilitasi pemenuhan capaian pembelajaran lulusan.	