Module designation	Basic Animal Nutrition					
Semester(s) in which the						
module is taught	Odd Semesters					
Person responsible for the	Prof. Dr. Ir. Zuprizal, DEA., IPU., ASEAN Eng.					
module	Prof. Dr. Ir. Kustantinah, DEA., IPU.					
	R. Edwin Indarto, S.Pt., M.P.					
	Ir. Nanung Danar Dono, S.Pt., M.P., Ph.D., IPM., ASEAN Eng.					
	Insani Hubi Zulfa S Pt M Sc					
	Dr. Aii Praba Baskara, S.Pt					
	Bahasa and English					
Relation to curriculum	Study Program's compulsory					
Teaching methods	Classical lecture and discussion					
Workload (incl. contact hours.						
self-study hours)	i otai workioad: 70 nours					
	Contact hours:					
	- Lecture: 35 hours					
	<ul> <li>Structure assignment: 5 hours</li> </ul>					
	- Exercise/simulation: 5 hours					
	Independent study: 25 hours					
Credit points	2/0 (3.2 ECTS)					
Required and recommended						
prerequisites for joining the	None					
module						
Module objectives/intended	Course Outcomes (CO):					
learning outcomes	1. Explain the understanding of nutrients needed as a basis for					
_	studying all life processes, especially in cells, and explain the					
	physiological functions and classification of each nutrient.					
	2. Able to classify nutrients as a basis in the preparation of					
	harmonious rations and understand the basic concepts of					
	proximate analysis and Van Soest analysis					
	3 Explain and differentiate the digestive tract system in ruminants					
	and non-ruminants which is peeded as a basis for studying the					
	digestive process of livestock					
	4. Explain and differentiate the process of putriant matcheliam in					
	4. Explain and dimerentiate the process of nutrient metabolism in					
	Evenested Learning Outcompany					
	Expected Learning Outcomes:					
	<ol> <li>Explain the function of air and water-related to livestock, besides being able to explain the sources of air and water nutrients related</li> </ol>					
	to livestock.					
	2. Explain the classification of six kinds of fractions that can be					
	known in proximate analysis and be able to explain the definitions					
	of crude protein, crude fiber, and crude fat in proximate analysis					
	3. Explain the difference between NDS and NDF fractions in Van					
	Soest's detergent fiber analysis system and their constituent fractions.					
	4. Explain the definition, constituent elements, component content,					
	basic structure, and physiological functions of carbohydrate, protein, and fat nutrients.					
	5. Distinguish and explain with examples 2 groups of carbohydrates					
	(sugar and non-sugar groups), saturated fatty acids and					
	unsaturated tatty acids, and essential amino acids and non-					
	6. Explain with examples the types of animals based on the type of					
	teed, and the types of digestive organs, and be able to explain the differences and similarities of animals based on their digestive					

	organs.							
	<ol> <li>Explain the process of digestion of carbohydrates, lipids, proteins, minerals, and vitamins in general.</li> </ol>							
	8. Explain the process of metabolism of energy, protein, minerals, and vitamins in general							
Content	The Basic Animal Nutrition course presents the principles of nutrition and their application in feeding livestock. The state of animal protein consumption in Indonesia, which is still below the optimal needs for growth, health, and work efficiency, is a challenge for livestock nutritionists and other livestock experts in Indonesia to increase animal protein production and production efficiency from livestock products. After obtaining knowledge and understanding related to the basic principles of nutrition and nutrition and the digestive system in livestock, an advanced course is provided, namely Animal Feed Nutrition.							
Exams and assessment formats	Assessment Course Ou Components (CO			Outcomes O)	Pe	ercentage (%)		
	1. Midterm exam		CO1, CC C	02, CO3 & 04	50			
	2. Final exam		CO1, CC C	02, CO3 & O4	50			
	Grade and Score							
	Grade Score Grad		Grade	•	Score			
	A		4.0	C+		2.25		
	A-		3.75	C		2.0		
	A/B		3.50	C-		1.75		
	B+		3.25	C/D D+		1.50		
	В		3.0			1.25		
	B-		2.75	D		1.0		
	B/C		2.50	E		0		
Study and examination	The final grade in the module is composed of 50% performance on							
requirements	Midterm exam and 50% final exam. Students must have a final grade of 70% or higher to pass.							
Reading list			-					