

Module designation	Animal Production System
Semester(s) in which the module is taught	Odd and Even Semesters
Person responsible for the module	Ir. Tri Satya Mastuti Widi, S.Pt., M.P., M.Sc., Ph.D., IPM., ASEAN Eng. Prof. Ir. I Gede Suparta Budisatria, M.Sc., Ph.D., IPU., ASEAN Eng. Prof. Dr. Ir Budi Prasetyo Widyobroto, DESS., DEA., IPU., ASEAN Eng. Dr. Ir. Siti Andarwati, S.Pt., M.P., IPM. Ir. Bambang Suwignyo, S.Pt., M.P., Ph.D., IPM., ASEAN Eng.
Language	Bahasa and English
Relation to curriculum	Study program's compulsory
Teaching methods	Classical lecture and discussion
Workload (incl. contact hours, self-study hours)	Total workload: 79 hours Contact hours: <ul style="list-style-type: none"> - Lecture: 23 hours - Academic activity: 28 hours Private study: 28 hours
Credit points	2/0
Required and recommended prerequisites for joining the module	None
Module objectives/intended learning outcomes	<p>Course Outcomes (CO):</p> <ol style="list-style-type: none"> 1. Able to explain the complexity of animal production system by thinking systematically (system thinking) and understand about system approach. 2. Able to explain system characteristic and determine the boundaries and hierarchy (subsystems, systems, and supra-systems) where the systems are represented. 3. Able to explain sustainability and its indicators from economic dimension, environmental dimension, and social dimension (EES dimensions or issues) of animal production system. 4. Able to understand the dynamic of animal husbandry development (regionalization vs globalization). <p>Expected Learning Outcomes:</p> <ul style="list-style-type: none"> - Attitudes and Behaviors: <ol style="list-style-type: none"> 1. Showing the social sensitivity and attention to the community and environment by respecting the culture diversity, view, religious, beliefs, and other people's opinion, and also obey the rules. (CO1, CO2, CO3, CO4) - Mastery in Science: <ol style="list-style-type: none"> 1. Able to master the current animal science and its application theory. (CO1, CO2, CO3, CO4) 2. Able to master the livestock production science, animal nutrition and fed science, animal products technology, and the livestock social economics in relation to food security and environment. (CO1, CO2, CO3, CO4) 3. Able to master the design, management, and development of livestock research. (CO3) - Special skills:

	<ol style="list-style-type: none"> 1. Able to formulate and solve problems in the national development especially in terms of animal husbandry. (CO3, CO4) 2. Able to solve problems and anticipate issues in the development of animal science and industry. (CO3, CO4) <p>- General skills:</p> <ol style="list-style-type: none"> 1. Able to develop logical, critical, systematic, and creative thought through scientific research, creation of design in the science and technology, which pays attention and applies humanity values according to their expertise. The graduates are able to arrange scientific concept and the study result based on the principles, procedures, and scientific ethics. (CO1, CO2, CO3, CO4) 2. Able to identify the science that becomes their research object and position it to a research map by using information technology in the context of science development and expertise implementation developed through interdisciplinary or multidisciplinary approaches. (CO1, CO2, CO3, CO4) 3. Able to make a decision in the context of solving problems in the development of science and technology, which pays attention and applies humanity values based on analysis study or experiment towards information and data. (CO3, CO4) 4. Able to communicate the result of reasoning and scientific research in form of thesis and scientific writing responsibly based on academic ethics in the accredited national journal. (CO2, CO3, CO4) 5. Able to communicate spoken and written English effectively by using the information technology for the development of animal science and its implementation. (CO2, CO3, CO4). 																				
Content	<p>The course is focused on comprehension regarding the complexity system of animal production to achieve sustainability from farm level to regional level. Students will learn about the development of animal production system with emphasizing on animal's double purpose, economic viability, social acceptability, animal welfare, and environmental aspects.</p>																				
Exams and assessment formats	<table border="1"> <thead> <tr> <th data-bbox="550 1491 842 1563">Assessment Components</th> <th data-bbox="842 1491 1133 1563">Course Outcomes (CO)</th> <th data-bbox="1133 1491 1426 1563">Percentage (%)</th> </tr> </thead> <tbody> <tr> <td data-bbox="550 1563 842 1706">1. Midterm exam (written test, take home exam, paper assignment)</td> <td data-bbox="842 1563 1133 1706">CO1 & CO2</td> <td data-bbox="1133 1563 1426 1706">30</td> </tr> <tr> <td data-bbox="550 1706 842 1850">2. Final exam (written test, take home exam, paper assignment)</td> <td data-bbox="842 1706 1133 1850">CO3 & CO4</td> <td data-bbox="1133 1706 1426 1850">30</td> </tr> <tr> <td data-bbox="550 1850 842 1921">3. Quizzes</td> <td data-bbox="842 1850 1133 1921">CO1, CO2, CO3 & CO4</td> <td data-bbox="1133 1850 1426 1921">10</td> </tr> <tr> <td data-bbox="550 1921 842 1993">4. Presentation</td> <td data-bbox="842 1921 1133 1993">CO1, CO2, CO3 & CO4</td> <td data-bbox="1133 1921 1426 1993">10</td> </tr> <tr> <td data-bbox="550 1993 842 2069">5. Take-home written assignments</td> <td data-bbox="842 1993 1133 2069">CO1, CO2, CO3 & CO4</td> <td data-bbox="1133 1993 1426 2069">20</td> </tr> </tbody> </table>	Assessment Components	Course Outcomes (CO)	Percentage (%)	1. Midterm exam (written test, take home exam, paper assignment)	CO1 & CO2	30	2. Final exam (written test, take home exam, paper assignment)	CO3 & CO4	30	3. Quizzes	CO1, CO2, CO3 & CO4	10	4. Presentation	CO1, CO2, CO3 & CO4	10	5. Take-home written assignments	CO1, CO2, CO3 & CO4	20		
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	Grade and Score			
	Grade	Score	Grade	Score
	A	≥80	C+	45-49,9
	A-	75-79,9	C	40-44,9
	A/B	70-74,9	C-	35-39,9
	B+	65-69,9	C/D	30-34,9
	B	60-64,9	D+	25-29,9
	B-	55-59,9	D	20-24,9
	B/C	50-54,9	E	0-19,9
Study and examination requirements	The final grade in the module is composed of 30% performance on Midterm exam, 30% final exam, 10% quiz, 10% presentation, 20% paper. Students must have a final grade of 70% or higher to pass			
Reading list	<ul style="list-style-type: none"> - A review of farm level indicators of sustainability with a focus on CAP and FADN - SAFA: Sustainability assessment of food and agriculture Systems indicators. Food and Agriculture Organization of the United Nations - Rome 2013 - BAROMETER Sustainability: What it's for and how to use it. IUCN. The World Conversation Union. 1996. - A Method Using Sustainability Indicators to Compare Conventional and Animal-Friendly Egg Production Systems. Poultry Science 81:173–181. - Livestock Production System. Lecture Note. I.G.S.Budisatria dan H.M.J.Udo. - System Approach in Animal Sciences. Lecture Material. Wageningen University 			