

Module designation	Animal Production System Progress
Semester(s) in which the module is taught	Odd and even semesters
Person responsible for the module	Ir. Yustina Yuni Suranindyah, M.S., Ph.D. Prof. Dr. Ir. Budi Prasetyo Widyobroto, DEA., DESS., IPU., ASEAN Eng. Ir. Panjono, S.Pt., MP., Ph.D., IPM., ASEAN Eng. Ir. Tri Satya Mastuti Widi, S.Pt., M.P., M.Sc., Ph.D., IPM., ASEAN Eng. Ir. Heru Sasongko, M.P. drh. Bambang Ariyadi, M.P., Ph.D.
Language	Bahasa and English
Relation to curriculum	Specialization's Compulsory
Teaching methods	Classical lecture and discussion
Workload (incl. contact hours, self-study hours)	Total workload: 79 hours Contact hours: - 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. Be able to identify the trend and the problem in animal production system 2. Be able to identify the supporting factors behind the change (evolution) in animal production system 3. Be able to analyse the impacts caused by the supporting factors (the causes) in animal production system 4. Be able to measure on how the trends in animal production system will be continued in the future <p>Expected Learning Outcomes:</p> <ul style="list-style-type: none"> - Attitudes and Behaviors: <ol style="list-style-type: none"> 1. Be accountable for professional practices that consist of accepting sue for any professional decision and action according to their area's scope and according to the law/regulations. (CO1, CO2, CO3, CO4) - Mastery in Sciences: <ol style="list-style-type: none"> 1. Able to develop new science and technology concepts to solve problems in the field of animal husbandry through research with multidisciplinary and transdisciplinary approaches. (CO1, CO2) - Special skills: <ol style="list-style-type: none"> 1. Able to manage, lead and develop research in the field of animal husbandry, as well as communicate the results and get recognition at the national and international levels for the benefit of humankind. (CO2, CO3, CO4) - General skills: <ol style="list-style-type: none"> 1. Able to find or develop new theories/concepts/ideas and

	<p>contribute to the development and practice of science and/or technology by producing scientific research based on scientific methodology, logical, critical, systematic, and creative thinking through interdisciplinary, multidisciplinary, or transdisciplinary approaches, pay attention to and apply human values in their field of expertise. (CO2, CO3, CO4)</p> <p>2. Able to develop a research roadmap to compile scientific, technological, or artistic arguments and solutions based on a critical view of facts, concepts, principles, or theories with an interdisciplinary, multidisciplinary, or transdisciplinary approach, based on a study of the main objectives of the research and their constellation on broader targets. (CO2, CO3, CO4)</p> <p>3. Able to communicate the result of reasoning and scientific research in the form of dissertation and scientific writing responsibly based on academic ethics. (CO3, CO4)</p>																																													
Content	<p>This course discusses about the condition of the current animal production system in meat animal, poultry, and dairy animal together with the trend and the problem globally followed with the assessment on how the trend will be continued in the future.</p>																																													
Exams and assessment formats	<table border="1"> <thead> <tr> <th data-bbox="595 904 951 981">Assessment Components</th> <th data-bbox="951 904 1217 981">Course Outcomes (CO)</th> <th data-bbox="1217 904 1402 981">Percentage (%)</th> </tr> </thead> <tbody> <tr> <td data-bbox="595 981 951 1048">1. Midterm exam (written test, paper assignment)</td> <td data-bbox="951 981 1217 1048">CO 1 & CO 2</td> <td data-bbox="1217 981 1402 1048">50</td> </tr> <tr> <td data-bbox="595 1048 951 1122">2. Final exam (written test, paper assignment)</td> <td data-bbox="951 1048 1217 1122">CO 1, CO 2, CO 3 & CO 4</td> <td data-bbox="1217 1048 1402 1122">50</td> </tr> <tr> <th colspan="4" data-bbox="595 1122 1402 1155">Grade and Score</th> </tr> <tr> <th data-bbox="595 1155 791 1189">Grade</th> <th data-bbox="791 1155 995 1189">Score</th> <th data-bbox="995 1155 1200 1189">Grade</th> <th data-bbox="1200 1155 1402 1189">Score</th> </tr> <tr> <td data-bbox="595 1189 791 1227">A</td> <td data-bbox="791 1189 995 1227">≥80</td> <td data-bbox="995 1189 1200 1227">C+</td> <td data-bbox="1200 1189 1402 1227">45-49,9</td> </tr> <tr> <td data-bbox="595 1227 791 1265">A-</td> <td data-bbox="791 1227 995 1265">75-79,9</td> <td data-bbox="995 1227 1200 1265">C</td> <td data-bbox="1200 1227 1402 1265">40-44,9</td> </tr> <tr> <td data-bbox="595 1265 791 1303">A/B</td> <td data-bbox="791 1265 995 1303">70-74,9</td> <td data-bbox="995 1265 1200 1303">C-</td> <td data-bbox="1200 1265 1402 1303">35-39,9</td> </tr> <tr> <td data-bbox="595 1303 791 1341">B+</td> <td data-bbox="791 1303 995 1341">65-69,9</td> <td data-bbox="995 1303 1200 1341">C/D</td> <td data-bbox="1200 1303 1402 1341">30-34,9</td> </tr> <tr> <td data-bbox="595 1341 791 1379">B</td> <td data-bbox="791 1341 995 1379">60-64,9</td> <td data-bbox="995 1341 1200 1379">D+</td> <td data-bbox="1200 1341 1402 1379">25-29,9</td> </tr> <tr> <td data-bbox="595 1379 791 1417">B-</td> <td data-bbox="791 1379 995 1417">55-59,9</td> <td data-bbox="995 1379 1200 1417">D</td> <td data-bbox="1200 1379 1402 1417">20-24,9</td> </tr> <tr> <td data-bbox="595 1417 791 1451">B/C</td> <td data-bbox="791 1417 995 1451">50-54,9</td> <td data-bbox="995 1417 1200 1451">E</td> <td data-bbox="1200 1417 1402 1451">0-19,9</td> </tr> </tbody> </table>	Assessment Components	Course Outcomes (CO)	Percentage (%)	1. Midterm exam (written test, paper assignment)	CO 1 & CO 2	50	2. Final exam (written test, paper assignment)	CO 1, CO 2, CO 3 & CO 4	50	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
Assessment Components	Course Outcomes (CO)	Percentage (%)																																												
1. Midterm exam (written test, paper assignment)	CO 1 & CO 2	50																																												
2. Final exam (written test, paper assignment)	CO 1, CO 2, CO 3 & CO 4	50																																												
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	<p>The final grade in the module is composed of 50% performance on Midterm exam, 50% final exam. Students must have a final grade of 70% or higher to pass</p>																																													
Reading list	<ul style="list-style-type: none"> - European Commission. Structure and dynamics of EU farms : changes, trends and policy relevance. EU Agricultural Economics Briefs. 2013: 1–15. - Alvarez A, del Corral J, Solís D, Pérez JA. Does Intensification Improve the Economic Efficiency of Dairy Farms? J Dairy Sci. Elsevier; 2008;91: 3693–3698. doi:10.3168/jds.2008-1123 [PubMed] - Bava L, Sandrucci A, Zucali M, Guerri M, Tamburini A. How can farming intensification affect the environmental impact of milk production? J Dairy Sci. 2014;97: 4579–4593. doi: 10.3168/jds.2013-7530 [PubMed] - FAO animal production and health guidelines. guide to good dairy farming practice. Food and agriculture organization of the united nation and international dairy federation Rome, 2011. 																																													

	<ul style="list-style-type: none">- Georgina Villarreal Herrera. 2017. Sustaining Dairy, 2017. PhD thesis, Wageningen University, Wageningen, the Netherlands. With references, with summaries in English, Dutch and Spanish ISBN 978-94-6343-154-5 DOI 10.18174/410882. 331 pages.- Lhoste P. 1986. L'association agriculture - élevage. Evolution du système agropastoral au Siné - Saloum (Sénégal). Paris: INAPG, Cirad.- Landais E, Lhoste P, Guerin H. Les systèmes de gestion de la fumure animale et leur insertion dans les relations entre l'élevage et l'agriculture. Cahiers Agricultures 1993; 2:9-25.- Landais E, Lhoste P. L'association agriculture - élevage en Afrique intertropicale: un mythe techniciste confronté aux réalités du terrain. USDA. 2012. Milk Production Methodology and Quality Measures. the National Agricultural Statistics Service (NASS), Agricultural Statistics Board, United States Department of Agriculture (USDA). ISSN: 2167-1885.- Pearson RA, Lhoste P. Working animals in agriculture and transport. A collection of some current research and development observations. Wageningen Academic Publishers, The Netherlands, 2003. EAAP Technical series N 6
--	---