Module designation	Research Techniques in Animal Production				
Semester(s) in which the	Even semester				
module is taught	Even semester				
Person responsible for the	Prof. Ir. I Gede Suparta Budisatria, M.Sc., Ph.D., IPU., ASEAN Eng.				
module	Prof. Dr. Ir. Budi Prasetyo Widyobroto, DESS., DEA, IPU.,				
	ASEAN Eng.				
-	drh. Bambang Aryadi, M.P., Ph.D.				
Language	Bahasa and English				
Relation to curriculum	Specialization's Elective				
I eaching methods	Classical lecture and discussion				
vvorkload (Incl. contact nours,	Total workload: 79 hours				
sell-study 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	None				
module					
Module objectives/intended	Course Outcomes (CO):				
learning outcomes	1. Comprehend the research roles in science and technology				
	development process at animal production field.				
	2. Able to comprehend the problems comprehensively and identify				
	the problems in animal production research development and				
	also able to comprehend its research concepts and research				
	techniques.				
	3. Able to use various research methods and techniques which are				
	precise for getting accurate-meticulous problem solving in animal production field.				
	4. Able to elaborate the problems and connect them with problem				
	solving process through research in animal production field.				
	5. Able to translate the proposal systematically in arranging				
	research schedule and precise data processing which match				
	with the method used.				
	Expected Learning Outcomes:				
	- Mastery in Sciences:				
	1. Able to master the current animal science and its application				
	theory. (CO1, CO2, CO3, CO4, CO5)				
	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, CO5)				
	of livestock research. (CO3, CO4, CO5)				
	- Special skills:				
	1. Able to make innovation in the animal husbandry based on				
	the development of science and technology. (CO1, CO2,				
	CO3, CO4, CO5)				
	 Able to design interdisciplinary and multidisciplinary research in the animal husbandry. (CO2, CO3, CO4, CO5) 				

Content evelopment especially in terms of animal husbandry. (CO3, CO4, CO5) 4. Able to solve problems and anticipate issues in the development of animal science and industry. (CO5) - General skills: 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 experities. The graduates are able to arrange scientific concept and the study result based on the principles, procedures, and scientific ethics. (CO1, CO2, CO3, CO4, CO5) 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 approaches. (CO2, CO3, CO4, CO5) 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. (CO5) 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. (CO5) 5. Able to communicate spoken and written English effectively by using the information at exploring the flam production of meat, egg, and milk. This course is provided as the stituents are able to find out the differences and also the similarities concerning to the comprehension in doing implementation at animal science field with all problems included especially for each laboratory. By using the introductory, students have understanding in animal collection number as sample, specific factors whi		3. Able to formulate and solve problems in the national						
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		course is by quiz and lest.						

Exams and assessment	Assessment		Course Outcomes		Porcontago (%)		
formats	Components	5	(C	0)	Percentage (%)		
	1. Midterm e (written test, home exam, pa assignment)	xam take aper	CO1, CO2 & CO3		40		
	2. Final e (written test, home exam, pa assignment)	xam take aper	CO3, CO4 & CO5		40		
	3. Short quizzes		CO1, CO2 & CO3		5		
	4. Presentation		CO1, CO2, CO3, CO4 & CO5		5		
	5. Take-home wr assignments	5. Take-home written assignments		CO1, CO2, CO3, CO4 & CO5		10	
			Grade ar	d Score			
	Grade	:	Score	Grade	,	Score	
	A		≥80	C+		45-49,9	
	A-	7	5-79,9	С		40-44,9	
	A/B	70-74,9		C-		35-39,9	
	B+	6	5-69,9	C/D		30-34,9	
	В	6	0-64,9	D+		25-29,9	
	B-	5	5-59,9	D		20-24,9	
	B/C	5	0-54,9	E	0-19,9		
Study and examination	The final grade i	n the	module is c	omposed of	f 40%	performance on	
requirements	take-bome writte	11 %U%	ianment St	// QUIZ, 5% udents mus	preser t bove	ntation, and 10%	
	70% or higher to	pass	igninent. St		t nave	e a fillar grade of	
Reading list	 Rapid rural appraisal, participatory rural appraisal and aquaculture Sustainability Pathways: Sustainability and organic livestock Metode, Teknik, Instrument dan Analisa Penelitian Getting started with Stella@ v 6.0. MM. High Personal Systems Inc. Tersedia di: http://www.hps-inc.com Problem Tree Analysis. MDF Tool. Tersedia di: http://www.problem_tree_analysismdf_undated.pdf 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, Guerci 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 nations and international dairy federation Rome, 2011. 						

_	Georgina	Villarreal	Herrera.	2017.	Sustaining
	Dairy, sep 2017.F	PhD the	esis, Wa	geningen	University,
	Wageningen,	the Neth	nerlands. V	Vith refere	ences, with
	summaries in I	English, Du	tch and Spa	nish ISBN 🤅	978-94-6343-
	154-5 DOI 10.1	18174/4108	82. 331 page	es.	
-	LhosteP. 1986.	. L'associati	on agricultur	e - élevage.	Evolution du
	systèmeagropa	astoral au	Siné - Sa	loum (Sén	égal). Paris:
	INAPG, Cirad.				
-	LandaisE, Lho	steP, Gueri	inH. Les sys	stèmes de o	gestion de la
	fumureanimale	e et leur i	insertion da	ins les rel	ations entre
	l'élevage et l'ag	griculture. C	ahiers Agric	ultures 199	3; 2: 9-25.
-	Landais E,	Lhoste.	L'associ	ation ag	riculture -
	élevageenAfriq	queintertropi	icale: un m	ythetechnic	isteconfronté
	aux réalités	du terrain	. USDA. 2	2012. Milk	Production
	Methodology a	and Quality	Measures.	the Nationa	I Agricultural
	Statistics Servi	ice (NASS),	, Agricultural	Statistics E	Board, United
	States Departm	ment of Agri	culture (USE	DA). ISSN: 2	167-1885.
-	Pearson RA,	Lhoste P.	Working ani	mals in ag	riculture and
	transport. A	collection	of some	current re	search and
	development o	bservations	. Wageninge	en Academi	c Publishers,
	The Netherland	ds, 2003. E/	AAP Technic	cal series N	6.