06 December 2018

Course: Meat, Draught, and Companion Animal Production System

1. **Type** **:** Specialization's Compulsory
2. **Code** **:** PTD 6202
3. **Credit** **:** 2/0
4. **Semester** **:** Odd
5. **Description** **:**

   This course focuses on understanding the production system of meat, draught, and companion animals, as well as its experiments and problems by reviewing the development of commodities, products and regions, and considering aspects of the development and application of technology, legislation and regulation.

6. **Course Outcomes (CO)**

   CO 1 : Able to describe the production system of meat, draught, and companion animals, and its relation between the subsystem (components), problems, and stakeholders.

   CO 2 : Able to study the development of commodities, products and regions

   CO 3 : Able to elaborate the aspects of the development and application of technology, legislation and regulation in the production system of meat, draught, and companion animals.

7. **The Alignment Between CO and ELO**

CO*	ELO**																	
	A				B			C				D					
	1	2	3	4	1	2	3	1	2	3	4	1	2	3	4	5	6
CO 1			✓		✓	✓						✓	✓				
CO 2			✓		✓	✓						✓	✓		✓		✓
CO 3			✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

*CO refers to point 6.

**Expected Learning Outcomes (ELO) are written below,

A. Attitudes and Behaviors	
The graduates are able to behave well, correctly, and culturally as the result of internalization and actualization of values and norms, which is reflected in a spiritual and social life through learning process, experience, research, and/or community development in the animal husbandry.	
1	Piety to God and be able to show religious attitude and maintain the humanity values in carrying the task, which is based on religion, moral, and ethics.
2	Be proud and love the homeland show nationalism, and contribute to the improvement of the life quality in the community, nation and country, and the advancement of civilization according to Pancasila.
3	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.
4	Be accountable in carrying the professional practice that includes ability to accept accountability towards decision and professional action. It shall be according to the scope of the practice under their responsibility and laws.
B. Mastery in Sciences	
Master the theory of the current science in the animal husbandry and its application.	
1	Able to master the current animal science and its application theory.

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.
3	Able to master the design, management, and development of livestock research.
C. Special Skills The graduates are able to develop science, technology, and arts in the animal husbandry through interdisciplinary/multidisciplinary innovative and tested research.	
1	Able to make innovation in the animal husbandry based on the development of science and technology.
2	Able to design interdisciplinary and multidisciplinary research in the animal husbandry.
3	Able to formulate and solve problems in the national development especially in terms of animal husbandry.
4	Able to solve problems and anticipate issues in the development of animal science and industry.
D. General Skills The graduates are able to manage resources by utilizing science, technology, and arts to solve problems in the animal husbandry with current science and also conduct research with accountability and full responsibility.	
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.
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.
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.
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.
5	Able to maintain the academic integrity generally and avoid the plagiarism practice.
6	Able to communicate spoken and written English effectively by using the information technology for the development of animal science and its implementation.

8. Course Content

Week-	CO	Topic/ Sub topic	Learning Activity	Assessment Tools	Allocated time	Lecturer
1	CO 1	Introduction on the meat, draught, and companion animal production system	Classical lecture; self-study; discussion	Exam	2	EB
2	CO 1	Approaches on meat, draught, and companion animal production	Classical lecture; self-study; discussion	Exam	2	IGSB

		system: scientific and research (tropic and subtropic)				
3	CO 1	Supply chain and value of meat, draught, and companion animal	Classical lecture; self-study; discussion	Exam	2	P
4	CO 1	Problem identification and stakeholder analysis	Classical lecture; self-study; discussion	Exam	2	TSMW
5					2	TSMW
6	CO 2	Commodity development (horizontal integration)	Classical lecture; self-study; discussion	Exam	2	NN
7	CO 2		Classical lecture; self-study; discussion	Exam	2	NN
Midterm						
8	CO 2	Product development (vertical integration 'from farm to fork')	Classical lecture; self-study; discussion	Exam	2	P
9	CO 2		Classical lecture; self-study; discussion	Exam	2	P
10	CO 3	Technology development and application	Group works	Tugas Terstruktur	2	EB
11	CO 3		Group works	Tugas Terstruktur	2	EB
12	CO 3	Legislation and regulation	Group works and discussion	Tugas Terstruktur	2	IGSB
13	CO 3	Presentation and general discussion	Group works and discussion	Tugas Terstruktur	2	All team

14	CO 3	Presentation and general discussion	Group works and discussion	Tugas Terstruktur	2	
Final Exam						

9. Assessment

Component	CO	Percentage (%) for final grade	Minimum Satisfactory Level
Midterm	CO 1	35 %	70
Quiz	CO 1	05%	70
Assignment and paper	CO 3	25 %	70
Final exam	CO 2	35 %	70
Total		100	

10. Lecturer

1. Tim Dosen

11. Reference

1. A review of farm level indicators of sustainability with a focus on CAP and FADN
2. SAFA : Sustainability assessment of food and agriculture Systems indicators. Food and Agriculture Organization of the United Nations - Rome 2013
3. BAROMETER Sustainability : What it's for and how to use it. IUCN. The World Conversation Union. 1996.
4. A Method Using Sustainability Indicators to Compare Conventional and Animal-Friendly Egg Production Systems. Poultry Science 81:173–181.
5. Livestock Production System. Lecture Note. I.G.S.Budisatria dan H.M.J.Udo.
6. System Approach in Animal Sciences. Lecture Material. Wageningen University