06 December 2018

Course: Industrial Techniques of Meat, Sport, and Companion Animals

1. **Type** **:** Specialization's Elective
2. **Code** **:** PTD 6205
3. **Credit** **:** 3/0
4. **Semester** **:** Odd
5. **Description** **:**

   This course discusses about management techniques in the industry of meat, draught, and companion animals, by focusing on effective, efficient, and sustainable optimization.

6. **Course Outcomes (CO)**

   CO 1 : Students understand the techniques on maintenance, transportation, and slaughtering the meat animals, and able to develop industrial models of meat animals.

   CO 2 : Students understand the maintenance techniques, and job training, as well as being able to develop a sporting animal industry model.

   CO 3 : Students understand the techniques of maintaining and evaluating companion animals, as well as compiling a model of companion animal industry and experimental 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/Subtopic	Learning Activity	Assessment Tools	Allocated Time	Lecturer
1		Introduction		Presentation and discussion		2
2	1	Meat animal	Housing	Presentation and discussion	Paper and presentation	2
3	1		Breeding and reproduction	Presentation and discussion	Paper and presentation	2
4	1		Feed	Presentation and discussion	Paper and presentation	2

5	1		Disease management	Presentation and discussion	Paper and presentation	2
6	1		Identification and recording	Presentation and discussion	Paper and presentation	2
7	1		Transportation	Presentation and discussion	Paper and presentation	2
Midterm Examination						
8	1		Slaughtering	Presentation and discussion	Paper and presentation	2
9	1		Meat storing and display packaging	Presentation and discussion	Paper and presentation	2
10	2	Draught animal	Rearing	Presentation and discussion	Paper and presentation	2
11	2		Training	Presentation and discussion	Paper and presentation	2
12	2		Equipment and tools	Presentation and discussion	Paper and presentation	2
13	3	Companion animal	Rearing	Presentation and discussion	Paper and presentation	2
14	3		Evaluation	Presentation and discussion	Paper and presentation	2
Final Examination						

9. Practicum

Week	Activity	Methods	Total Hours
1	Meat animal industrial system	Industrial visit	9
2	Sport animal industrial system	Industrial visit	3

3	Companion animal industrial system	Industrial visit	2

10. Assessment

Component	CO	Percentage (%) for final grade	Minimum Satisfactory Level
Paper	CO 1; CO 2; CO 3	10	70
Presentation	CO 1; CO 2; CO 3	10	70
Discussion	CO 1; CO 2; CO 3	10	70
Midterm	CO 1	20	70
Final Exam	CO 1; CO 2; CO 3	20	70
Practicum	CO 1; CO 2; CO 3	30	
Total		100	

11. Lecturer

1. Ir. Panjono, S.Pt., M.P., Ph.D., IPM.
2. Prof. Dr. Ir. Endang Baliarti, S.U.
3. Prof. Dr. Ir. Nono Ngadiyono, M.S., IPM.
4. Prof. Ir. I Gede Suparta Budisatria, M.Sc., Ph.D., IPU.
5. Ir. Tri Satya Mastuti Widi, S.Pt., M.P., M.Sc., Ph.D., IPM.
6. Muhammad Danang Eko Yulianto, S.Pt., M.Si.

12. Reference

1. Journal of Animal Science. www.academic.oup.com/jas
2. Asia Australasian Journal of Animal Science. www.ajas.info
3. Livestock Science Journal. www.sciencedirect.org
4. Small Ruminant Science Journal. www.sciencedirect.org
5. Meat Science Journal. www.sciencedirect.org