Course: Advanced Animal Evaluation and Judgement

1. **Type**   : Specialization's Elective
2. **Code**   : PTR 6505
3. **Credit**   : 3/0
4. **Semester**   : Odd
5. **Description** :

This course learns the assessment tools and methods towards the exterior performance, the quantitative characteristics (body measures and weight) and also the assessment towards the carcass performance. The students who have taken this course are expected to comprehend and able to give the assessment towards the animal performance and also the animal product in form of carcass.

6. **Course Outcomes (CO)**

   CO 1   : Students are able to comprehend the concept of livestock assessment and evaluation based on quantitative and qualitative performance

   CO 2   : Students are able to apply the knowledge in predicting the beef cattle productivity based on exterior performance and the quantitative characteristics which can been seen on each individual.

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 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	CO 1	Introduction	Classical lecture; discussion		2 x 50 minutes	Prof. Dr. Ir. Sumadi, M.S., IPU.
2	CO 1	Judging on beef cattle	Classical lecture; discussion		2 x 50 minutes	Prof. Dr. Ir. Sumadi, M.S., IPU.
3	CO 1	Judging on beef cattle (cont)	Classical lecture; discussion		2 x 50 minutes	Prof. Dr. Ir. Sumadi, M.S., IPU.
4	CO 1	Evaluation on beef cattle	Classical lecture; discussion		2 x 50 minutes	Prof. Dr. Ir. Nono Ngadiyono, M.S., IPU.

5	CO 1	Judging on sheep	Classical lecture; discussion		2 x 50 minutes	Prof. Dr. Ir. Sumadi, M.S., IPU.
6	CO 1	Judging on sheep/goat	Classical lecture; discussion		2 x 50 minutes	Prof. Dr. Ir. Sumadi, M.S., IPU.
7	CO 1	Evaluation on sheep/goat productivity	Classical lecture; discussion		2 x 50 minutes	Prof. Dr. Ir. Nono Ngadiyono, M.S., IPU.
Midterm Examination						
8	CO 1	Judging on swine	Classical lecture; discussion		2 x 50 minutes	Prof. Dr. Ir. Sumadi, M.S., IPU.
9	CO 1	Judging on swine (cont)	Classical lecture; discussion		2 x 50 minutes	Prof. Dr. Ir. Sumadi, M.S., IPU.
10	CO 1	Judging on swine productivity	Classical lecture; discussion		2 x 50 minutes	Prof. Dr. Ir. Sumadi, M.S., IPU.
11	CO 1	Judging on buffalo	Classical lecture; discussion		2 x 50 minutes	Prof. Dr. Ir. Sumadi, M.S., IPU.
12	CO 2	Judging on buffalo productivity	Classical lecture; discussion		2 x 50 minutes	Prof. Dr. Ir. Nono Ngadiyono, M.S., IPU.
13	CO 2	Presentation	Classical lecture; discussion		2 x 50 minutes	Prof. Dr. Ir. Sumadi, M.S., IPU.
14	CO 2	Presentation	Classical lecture; discussion		2 x 50 minutes	Prof. Dr. Ir. Sumadi, M.S., IPU.
15	CO 2	Presentation	Classical lecture; discussion		2 x 50 minutes	Prof. Dr. Ir. Sumadi, M.S., IPU.
Final Examination						

9. Practicum

Week	Activity	Methods	Total Hours

1	Judging on beef cattle	Animal contest (quantitative and qualitative evaluation)	6
2	Carcass on beef cattle	Carcass measurement on abattoir	6
3	Judging on sheep/goat	Animal contest (quantitative and qualitative evaluation)	6

10. Assessment

Component	CO	Percentage (%) for final grade	Minimum Satisfactory Level
Quiz	CO 1	5	70
Paper	CO 2	5	70
Practicum	CO 2	20	70
Midterm	CO 1	35	70
Final exam	CO 1	35	70
Total		100	

11. Lecturer

1. Prof. Dr. Ir. Sumadi, MS., IPU.
2. Ir. Tety Hartatik, S.Pt., Ph.D., IPM.
3. Ir. Dyah Maharani, S.Pt., MP., PH.D., IPM.

12. Reference

1. Hardjosubroto, W. 1994. Aplikasi Pemuliaan Ternak di Lapangan. PT. Gramedia Widiasarana, Jakarta.
2. Becker, W. A. 1992. Manual of Quantitative Genetics. Fifth Edition. Academic Enterprises. Pullman. Washington.
3. Kurnianto, E. 2009. Pemuliaan Ternak. Graha Ilmu. Yogyakarta. Indonesia.
4. Lasley, J. F. 1978. Genetics of Livestock Improvement. Edisi Ketiga. Prentice Hall. Inc. Englewood Cliffs. New Jersey.
5. Falconer, D. S. dan T. F. C. Mackay. 1996. Introduction to Quantitative Genetics. Fourth Edition. Longman Group Ltd. Malaysia.
6. Jurnal mengenai pemuliaan ternak terbaru, video