Module designation	Animal Reproduction and Physiology
Semester(s) in which the module is taught	Even semester
Person responsible for the module	Prof. Ir. Diah Tri Widayati, M.P., Ph.D., IPM. Dr. Ir. Sigit Bintara, S.Pt., M.Si., IPU., ASEAN Eng. Prof. Dr. Ir. Ismaya, M.Sc.
Language	Bahasa and English
Relation to curriculum	Specialization's Elective
Teaching methods	Classical lecture, discussion and lab works.
Workload (incl. contact hours, self-study hours)	Total workload: 121 hours Contact hours: - Lecture: 23 hours - Academic activity: 28 hours - Practicum: 42 hours Private study: 28 hours
Credit points	2/1
Required and recommended prerequisites for joining the module	None
Module objectives/intended learning outcomes	Course Outcomes (CO): 1. Able to comprehend and explain about the structure and function of animal body normal organ in the process of reproduction and physiology, 2. Able to explore, identify, and analyse the problems from case study related to animal reproduction and physiology. 3. Able to give fast response for every phenomenon happened that related with animal reproduction and physiology scope. 4. Able to comprehend the informatic technology application to increase insight and update the knowledge. Expected Learning Outcomes: - Mastery in Sciences: 1. 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) - Special skills: 1. Able to formulate and solve problems in the national development especially in terms of animal husbandry. (CO2) 2. Able to solve problems and anticipate issues in the development of animal science and industry. (CO3) - General skills: 1. 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. (CO4)
Content	This course is designed to discuss the reproduction concept and its application on animal, endocrinology, anatomy, and physiology, spermatogenesis, oogenesis, fertilization, pregnancy, birth, and

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<tr><td></td><td colspan="4">behavior. All those points will be learned for improving animal reproduction performance.</td></tr>
<tr><td rowspan="10">Exams and assessment formats</td><td>Assessment Components</td><td colspan="2">Course Outcomes (CO)</td><td>Percentage (%)</td></tr>
<tr><td>1. Midterm exam (written test, take home exam, paper assignment)</td><td colspan="2">CO1 & CO2</td><td>30</td></tr>
<tr><td>2. Final exam (written test, take home exam, paper assignment)</td><td colspan="2">CO1, CO2 & CO3</td><td>30</td></tr>
<tr><td>3. Short quizzes/ assignment</td><td colspan="2">CO3 & CO4</td><td>15</td></tr>
<tr><td>4. Practicum</td><td colspan="2">CO2, CO3 & CO4</td><td>25</td></tr>
<tr><td colspan="4">Grade and Score</td></tr>
<tr><td>Grade</td><td>Score</td><td>Grade</td><td>Score</td></tr>
<tr><td>A</td><td>≥80</td><td>C+</td><td>45-49,9</td></tr>
<tr><td>A-</td><td>75-79,9</td><td>C</td><td>40-44,9</td></tr>
<tr><td>A/B</td><td>70-74,9</td><td>C-</td><td>35-39,9</td></tr>
<tr><td>B+</td><td>65-69,9</td><td>C/D</td><td>30-34,9</td></tr>
<tr><td>B</td><td>60-64,9</td><td>D+</td><td>25-29,9</td></tr>
<tr><td>B-</td><td>55-59,9</td><td>D</td><td>20-24,9</td></tr>
<tr><td>B/C</td><td>50-54,9</td><td>E</td><td>0-19,9</td></tr>
<tr><td>Study and examination requirements</td><td colspan="4">The final grade in the module is composed of 30% performance on Midterm exam, 30% final exam, 15% quiz/take-home written assignment, and 25% practicum. Students must have a final grade of 70% or higher to pass.</td></tr>
<tr><td>Reading list</td><td colspan="4">

- Arthur, G.E., D.E. Noakes and H. Pearson, 1982, Veterinary Reproduction and Obstetrics, 5th edition, The English Language Book Society and BailliereTindall, London.
- Austin, C.R. and R.V. Short, 1987, Reproduction in Mammals, 2nd edition, Cambridge University Press, Cambridge
- Bearden, J. H. and J.W. Fuquay, 2004, Applied Animal Reproduction, Reston Publishing Company Inc., Virginia.
- Cupps, P.T., 1991, Reproduction in Domestic Animals, 4th edition, Academic Press Inc, London.
- Gordon, I., 2017, Reproductive Technologies in Farm Animals, 2nd edition, CABI Publishing, UK.
- Hafez, E.S.E., 2003, Reproduction in Farm Animals, 7th edition, Lea and Febiger, Philadelphia.
- Noakes, D.E., T.J. Parkinson, G.C.W. England, G. H. Arthurs. 2001. Arthus's Veterinary Reproduction. Saunders, Toronto

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