

Module designation	Production Biology of Meat, Draught, and Companion Animal
Semester(s) in which the module is taught	Even semester
Person responsible for the module	Prof. Dr. Ir. Endang Baliarti, SU. Prof. Dr. Ir. Nono Ngadiyono, MS., IPM., ASEAN Eng. Prof. Ir. I Gede Suparta Budisatria, M.Sc., Ph.D., IPU., ASEAN Eng. Ir. Panjono, S.Pt., M.P., Ph.D., IPM., ASEAN Eng. Ir. Tri Satya Mastuti Widi, S.Pt., M.P., M.Sc., Ph.D., IPM., ASEAN Eng.
Language	Bahasa and English
Relation to curriculum	Specialization's Elective
Teaching methods	Classical lecture and discussion
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	<p>Course Outcomes (CO):</p> <ol style="list-style-type: none"> <li>1. Students can understand the concept of livestock growth and development before birth to adulthood and measure parent performance.</li> <li>2. Students understand the process of fattening the livestock and muscle changes into meat, and measure the performance of meat animals.</li> <li>3. Students understand the work process of muscle and measure the performance of draught animals.</li> <li>4. Students understand the productions process and measure the performance of companion animals.</li> </ol> <p>Expected Learning Outcomes:</p> <ul style="list-style-type: none"> <li>- Mastery in Sciences: <ol style="list-style-type: none"> <li>1. Able to master the current animal science and its application theory. (CO1, CO2, CO3, CO4)</li> <li>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)</li> <li>3. Able to master the design, management, and development of livestock research. (CO1, CO2, CO3, CO4)</li> </ol> </li> <li>- Special skills: <ol style="list-style-type: none"> <li>1. Able to make innovation in the animal husbandry based on the development of science and technology. (CO1, CO2, CO3, CO4)</li> <li>2. Able to formulate and solve problems in the national development especially in terms of animal husbandry. (CO1, CO2, CO3, CO4)</li> <li>3. Able to solve problems and anticipate issues in the</li> </ol> </li> </ul>

	<p>development of animal science and industry. (CO1, CO2, CO3, CO4)</p> <p>- General skills:</p> <ol style="list-style-type: none"> <li>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. (CO1, CO2, CO3, CO4)</li> <li>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. (CO1, CO2, CO3, CO4)</li> <li>3. 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. (CO1, CO2, CO3, CO4)</li> <li>4. Able to communicate spoken and written English effectively by using the information technology for the development of animal science and its implementation. (CO1, CO2, CO3, CO4)</li> </ol>																							
Content	<p>This course develops understanding about the growth of animals starts from ovum, fetus, child, to adulthood, as well as the production of meat, draught and companion animals. In addition, this course also aims to develop and implement a method to measure the success of the production process, and becomes the basis for the development of productive and sustainable meat, draught and companion animals.</p>																							
Exams and assessment formats	<table border="1"> <thead> <tr> <th data-bbox="600 1402 850 1464">Assessment Components</th> <th data-bbox="863 1402 1129 1464">Course Outcomes (CO)</th> <th data-bbox="1134 1402 1394 1464">Percentage (%)</th> </tr> </thead> <tbody> <tr> <td data-bbox="600 1471 850 1615">1. Midterm exam (written test, take home exam, paper assignment)</td> <td data-bbox="863 1471 1129 1615">CO1 &amp; CO2</td> <td data-bbox="1134 1471 1394 1615">20</td> </tr> <tr> <td data-bbox="600 1621 850 1765">2. Final exam (written test, take home exam, paper assignment)</td> <td data-bbox="863 1621 1129 1765">CO2, CO3 &amp; CO4</td> <td data-bbox="1134 1621 1394 1765">20</td> </tr> <tr> <td data-bbox="600 1771 850 1839">3. Discussion</td> <td data-bbox="863 1771 1129 1839">CO1, CO2, CO3 &amp; CO4</td> <td data-bbox="1134 1771 1394 1839">10</td> </tr> <tr> <td data-bbox="600 1845 850 1912">4. Presentation</td> <td data-bbox="863 1845 1129 1912">CO1, CO2, CO3 &amp; CO4</td> <td data-bbox="1134 1845 1394 1912">10</td> </tr> <tr> <td data-bbox="600 1919 850 1986">5. Take-home written assignments</td> <td data-bbox="863 1919 1129 1986">CO1, CO2, CO3 &amp; CO4</td> <td data-bbox="1134 1919 1394 1986">10</td> </tr> <tr> <td data-bbox="600 1993 850 2060">6. Practicum</td> <td data-bbox="863 1993 1129 2060">CO1, CO2, CO3 &amp; CO4</td> <td data-bbox="1134 1993 1394 2060">30</td> </tr> </tbody> </table>	Assessment Components	Course Outcomes (CO)	Percentage (%)	1. Midterm exam (written test, take home exam, paper assignment)	CO1 & CO2	20	2. Final exam (written test, take home exam, paper assignment)	CO2, CO3 & CO4	20	3. Discussion	CO1, CO2, CO3 & CO4	10	4. Presentation	CO1, CO2, CO3 & CO4	10	5. Take-home written assignments	CO1, CO2, CO3 & CO4	10	6. Practicum	CO1, CO2, CO3 & CO4	30		
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	<b>Grade and Score</b>			
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	A	≥80	C+	45-49,9
	A-	75-79,9	C	40-44,9
	A/B	70-74,9	C-	35-39,9
	B+	65-69,9	C/D	30-34,9
	B	60-64,9	D+	25-29,9
	B-	55-59,9	D	20-24,9
	B/C	50-54,9	E	0-19,9
Study and examination requirements	The final grade in the module is composed of 20% performance on Midterm exam, 20% final exam, 10% quiz, 10% presentation, 10% take-home written assignment, 30% practicum. Students must have a final grade of 70% or higher to pass			
Reading list	<ul style="list-style-type: none"> <li>- Journal of Animal Science. <a href="http://www.academic.oup.com/jas">www.academic.oup.com/jas</a></li> <li>- Asia Australasian Journal of Animal Science. <a href="http://www.ajas.info">www.ajas.info</a></li> <li>- Livestock Science Journal. <a href="http://www.sciencedirect.org">www.sciencedirect.org</a></li> <li>- Small Ruminant Science Journal. <a href="http://www.sciencedirect.org">www.sciencedirect.org</a></li> <li>- Meat Science Journal. <a href="http://www.sciencedirect.org">www.sciencedirect.org</a></li> </ul>			