

Module designation	Latest Animal Science Progress
Semester(s) in which the module is taught	Odd and even semesters
Person responsible for the module	Prof. Ir. Yuny Erwanto, S.Pt., M.P., Ph.D., IPM. Prof. Dr. Ir. Ali Agus, DAA., DEA., IPU., ASEAN Eng. Prof. Ir. Budi Guntoro, S.Pt., M.Sc., Ph.D., IPU., ASEAN Eng. Ir. Dyah Maharani, S.Pt., M.P., Ph.D., IPM.
Language	Bahasa and English
Relation to curriculum	Study Program's Compulsory
Teaching methods	Classical lecture and discussion
Workload (incl. contact hours, self-study hours)	Total workload: 79 hours Contact hours: - Lecture: 23 hours - Academic activity: 28 hours Private study: 28 hours
Credit points	2/0
Required and recommended prerequisites for joining the module	None
Module objectives/intended learning outcomes	<p>Course Outcomes:</p> <ol style="list-style-type: none"> 1. Be able to comprehend the latest progress in the field of modern genetic for livestock development. 2. Be able to comprehend the latest progress in the field of production and the modern farming system which are efficient and environmentally friendly. 3. Be able to comprehend the latest progress in the field of feed formulation that can utilize the local resources in Indonesia, feed safety, and nutrigenomic 4. Be able to comprehend the latest progress of animal science related to the animal product processing and the need aspect for human food 5. Be able to comprehend the latest development of community empowerment patterns and the livestock development of local farming community with economic value 6. Be able to analyse the latest journal based on the field attached <p>Expected Learning Outcomes:</p> <p>- Attitudes and Behaviors:</p> <ol style="list-style-type: none"> 1. Be long life learning with basic character as religious attitudes, humanity, nationalism, tolerance, moderate, respecting in cultural diversity based on National Five Principle of Pancasila. (CO1, CO3) 2. Be accountable for professional practices that consist of accepting sue for any professional decision and action according to their area's scope and according to the law/regulations. (CO1, CO3, CO5, CO6) <p>- Mastery in Sciences:</p> <ol style="list-style-type: none"> 1. Able to master scientific philosophy and develop new science and technology in animal science is useful, competitive, and environmentally sound research with a multidisciplinary approach. (CO2, CO3, CO5, CO6) 2. Able to develop new science and technology concepts to

	<p>solve problems in the field of animal husbandry through research with multidisciplinary and transdisciplinary approaches. (CO2, CO5, CO6)</p> <p>- General skills:</p> <ol style="list-style-type: none"> 1. Able to find or develop new theories/concepts/ideas and contribute to the development and practice of science and/or technology by producing scientific research based on scientific methodology, logical, critical, systematic, and creative thinking through interdisciplinary, multidisciplinary, or transdisciplinary approaches, pay attention to and apply human values in their field of expertise. (CO2, CO5, CO6) 2. Able to develop a research roadmap to compile scientific, technological, or artistic arguments and solutions based on a critical view of facts, concepts, principles, or theories with an interdisciplinary, multidisciplinary, or transdisciplinary approach, based on a study of the main objectives of the research and their constellation on broader targets. (CO2, CO5, CO6) 																																																						
<p>Content</p>	<p>This course is a compulsory subject for the animal science doctoral study program who wants to provide insight and motivation in developing animal husbandry science based on the latest animal husbandry scientific developments in a broad sense. In this course, the results of in-depth and up-to-date research will be discussed in the fields of genetics, genetic engineering, embryology, livestock production and production systems, animal-derived food technology in depth related to aspects of food and human health, formula rations and future rations in the world of animal science, and the latest scientific updates in the livestock business in Indonesia and the world.</p>																																																						
<p>Exams and assessment formats</p>	<table border="1"> <thead> <tr> <th>Assessment Components</th> <th>Course Outcomes (CO)</th> <th>Percentage (%)</th> </tr> </thead> <tbody> <tr> <td>1. Midterm exam (written test, paper assignment)</td> <td>CO 1, CO 2 & CO 3</td> <td>35</td> </tr> <tr> <td>2. Final exam (written test, paper assignment)</td> <td>CO 4, CO 5 & CO 6</td> <td>35</td> </tr> <tr> <td>3. Short quizzes</td> <td>CO 1, CO 2 & CO 3</td> <td>10</td> </tr> <tr> <td>4. Persentation</td> <td>CO 1, CO 2 & CO 3</td> <td>10</td> </tr> <tr> <td>5. Take-home written assignment</td> <td>CO 4, CO 5 & CO 6</td> <td>10</td> </tr> <tr> <th colspan="4">Grade and Score</th> </tr> <tr> <th>Grade</th> <th>Score</th> <th>Grade</th> <th>Score</th> </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> </tbody> </table>	Assessment Components	Course Outcomes (CO)	Percentage (%)	1. Midterm exam (written test, paper assignment)	CO 1, CO 2 & CO 3	35	2. Final exam (written test, paper assignment)	CO 4, CO 5 & CO 6	35	3. Short quizzes	CO 1, CO 2 & CO 3	10	4. Persentation	CO 1, CO 2 & CO 3	10	5. Take-home written assignment	CO 4, CO 5 & CO 6	10	Grade and Score				Grade	Score	Grade	Score	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
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<p>Study and examination requirements</p>	<p>The final grade in the module is composed of 35% performance on Midterm exam, 35% final exam, 10% quiz, 10% presentation, and 10% take-home written assignment. Students must have a final grade of 70% or higher to pass</p>																																																						

Reading list	<ul style="list-style-type: none">- GMIA. Gelatin Manufacturers Institute Of america. 2012. Gelatin Handbook. Hill street, Woburn, Massachusetts, 01801.- Yuwono, T. 2005. Biologi Molekular. Penerbit Erlangga. Jakarta- Gomez-Guillen, M. C., B. Gimenez, M. E. Lopez-Caballero, M. P. Montero. 2011. Functional and bioactive properties of collagen and gelatin from alternative sources: A review. The Journal of Food Hydrocolloids 25:1813-1827.- Greene, D. M. 2003. Use of poultry collagen coating and antioxidants as flavor protection for cat foods made with rendered poultry fat. Virginia, United States: Virginia Polytechnic Institute and State University, MSc thesis.
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