

Module designation	Dairy and Milk Industry
Semester(s) in which the module is taught	Even Semester
Person responsible for the module	Prof. Dr. Ir. Tridjoko Wisnu Murti, DEA. Prof. Dr. Ir. Budi Prasetyo Widyobroto, DESS., DEA., IPU. Ir. Yustina Yuni Suranindyah, M.S., Ph.D., IPM.
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: <ul style="list-style-type: none"> <li>- Lecture: 23 hours</li> <li>- Academic activity: 28 hours</li> <li>- Practicum: 42 hours</li> </ul> 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 understand global dairy production systems of each continent.</li> <li>2. Student understands dairy cluster development</li> <li>3. Student understand global of trade, value chain of milk and milk products</li> <li>4. Student understand dairy supply chain region</li> <li>5. Students understand trade distortion</li> </ol> <p>Expected Learning Outcomes:</p> <ul style="list-style-type: none"> <li>- Attitudes and Behaviors: <ol style="list-style-type: none"> <li>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. (CO1)</li> <li>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. (CO2)</li> <li>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. (CO3)</li> <li>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. (CO1)</li> </ol> </li> <li>- Mastery in Sciences: <ol style="list-style-type: none"> <li>1. Able to master the current animal science and its application theory. (CO1)</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. (CO2)</li> </ol> </li> </ul>

	<p>3. Able to master the design, management, and development of livestock research. (CO3)</p> <p>- Special skills:</p> <ol style="list-style-type: none"> <li>1. Able to make innovation in the animal husbandry based on the development of science and technology. (CO4)</li> <li>2. Able to design interdisciplinary and multidisciplinary research in the animal husbandry. (CO5)</li> <li>3. Able to solve problems and anticipate issues in the development of animal science and industry. (CO3)</li> </ol> <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)</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. (CO4)</li> <li>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. (CO2)</li> <li>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. (CO5)</li> <li>5. Able to maintain the academic integrity generally and avoid the plagiarism practice. (CO5)</li> <li>6. Able to communicate spoken and written English effectively by using the information technology for the development of animal science and its implementation. (CO5)</li> </ol>		
Content	Discuss about Dairy Cluster Industry (Stock, Good Dairy Farming Practice, dairy animal other than cow), Global Dairy System (Oceania, America, India/China, Africa), Global Dairy Trade (marketing, distribution, trade distortion and value-added strategy).		
Exams and assessment formats	<b>Assessment Components</b>	<b>Course Outcomes (CO)</b>	<b>Percentage (%)</b>
	1. Midterm exam (written test, take home exam, paper assignment)	CO1, CO2, CO3, CO4 & CO5	25
	2. Final exam (written test, take home exam, paper assignment)	CO1, CO2, CO3, CO4 & CO5	30

	3. Short quizzes	CO1, CO2, CO3, CO4 & CO5	5
	4. Presentation	CO1, CO2, CO3, CO4 & CO5	10
	5. Take-home written assignments	CO1, CO2, CO3, CO4 & CO5	5
	6. Practicum	CO1, CO2, CO3, CO4 & CO5	25
<b>Grade and Score</b>			
	<b>Grade</b>	<b>Score</b>	<b>Grade</b>
	A	≥80	C+
	A-	75-79,9	C
	A/B	70-74,9	C-
	B+	65-69,9	C/D
	B	60-64,9	D+
	B-	55-59,9	D
	B/C	50-54,9	E
Study and examination requirements	The final grade in the module is composed of 25% performance on midterm exam, 30% final exam, 5% quiz, 10% presentation, 5% take-home written assignments (paper), and 25% practicum. Students must have a final grade of 70% or higher to pass		
Reading list	<ul style="list-style-type: none"> <li>- ILRI, 1999. Small holder dairying in the tropics. Edts Falvey, L. And C.Chantalakhana</li> <li>- IFCN, 2014. Status and prospect for smallholder milk production. Eds T.Hemme, and J. Otte. A Global Perspective</li> <li>- Murti, T.W.2013. Reorientasi pembangunan persusuan Indonesia menuju Indonesia sehat. Pidato GB</li> <li>- Murti, T.W. 2016. Pasca panen susu. Gadjah Mada University Press.</li> </ul>		