



**UNIVERSITAS SUMATERA UTARA (USU)  
FACULTY OF AGRICULTURE  
ANIMAL SCIENCE STUDY PROGRAM**

**Document  
Code  
(Follow)**

**SEMESTER LEARNING PLAN (RPS)**

COURSE (Course)	CODE	COURSE GROUP	CREDIT		SEMESTER	Date of Compilation
Management of Non Ruminant Livestock Industry	PTN4105	Exact	Theory =2	Practice =1	VII (Seven)	
<b>AUTHORIZATION / APPROVAL</b>	<b>SLP Developer Lecturer</b>		<b>Vice Dean I</b>		<b>Chairman of LINK-UP USU</b>	
			Dr. Lisnawita, SP, MP		Prof. Dr. Dwi Suryanto M.Sc.	
<b>Learning Outcomes</b>	<b>LO-PRODI Charged to MK</b>					
	LO02	Able to apply the concept of leadership and teamwork, communicate, motivate oneself and innovate in completing work in the livestock sector.				
	LO03	Able to identify, formulate, and find solutions to problems related to the livestock sector				
	LO06	Conduct supervision and evaluation of the completion of assigned work and be able to manage lifelong learning independently				
	LO08	Able to manage integrated and sustainable livestock farming based on integration with other agro-ecosystems as well as the latest applications in processing livestock products and waste.				
	LO09	Able to manage and implement aspects of efficient feed provision and technology				
	LO10	Able to plan, evaluate and manage livestock business with the principles of agribusiness				
	LO11	Have coherent and up-to-date knowledge in the field of animal Science science and in accordance with applicable legal regulations and can apply aspects of animal welfare.				

LO12	Have coherent and up-to-date knowledge in the field of animal science and in accordance with applicable legal regulations and can apply aspects of animal welfare.
<b>Course Learning Outcomes (CLO)</b>	
CLO0218: Able to explain the latest innovations related to the application of technology in the management of the non-ruminant livestock industry (horses, pigs and rabbits)	13.96%
CLO0343: Able to explain layout, input and output processes, and processing in non-ruminant livestock industry management (horses, pigs and rabbits)	12.85%
CLO0637: Able to explain the evaluation related to the application of technology in the non-ruminant livestock industry other than poultry on livestock productivity.	13.96%
CLO0825: Able to apply technology in non-ruminant livestock industry management based on integrated agricultural integration	12.85%
CLO0918: Able to apply the best technology in processing non-ruminant livestock feed other than poultry	12.85%
CLO1016: Able to make business plans related to the non-ruminant livestock industry, other than poultry, with agribusiness principles	12.85%
CLO1138: Able to analyze various best techniques and methods in process technology in the non-ruminant livestock industry (horses, pigs, rabbits, etc.)	7.65%
CLO1226: Able to explain regulations that support the use of technology in the non-ruminant livestock industry (horses, pigs, rabbits, etc.)	12.85%
<b>Final Ability of Each Learning Stage (Sub-CLO)</b>	
Sub-CLO1	After taking this lecture, students will be able to explain the forms of non-ruminant livestock businesses (commercial, semi-commercial and traditional) and the factors that influence the establishment of the non-ruminant livestock industry.
Sub-CLO2	After taking this lecture, students will be able to explain the management of non-ruminant livestock mating (poultry, rabbits, horses and pigs)
Sub-CLO3	After taking this lecture, students will be able to explain the types of cages, facilities and infrastructure layout in building a non-ruminant livestock farming industry.
Sub-CLO4	After taking this lecture, students will be able to explain the application and role of non-ruminant livestock feed processing technology (physical/chemical/biological/combo)



<b>Brief Description of Course</b>	<p>After completing the Non-Ruminant Livestock Industry Management course, 7th semester students, Animal Science Study Program, Faculty of Agriculture, University of North Sumatra are expected to be able to explain the management of non-ruminant livestock maintenance from upstream to downstream, so that after taking this course, students are expected to have skills in processing non-ruminant livestock feed. This course is conducted in Indonesian with 14 face-to-face meetings consisting of material presentation, discussions, presentations, online/offline practicums, quizzes and assignments.</p>
<b>Study Material:</b>  Learning materials	<p><b>BK03</b>Animal Production Science  <b>BK07</b>Application and Development of Animal Science and Technology</p> <ol style="list-style-type: none"> <li>1. Forms of dairy farming (commercial, semi-commercial and traditional) and factors influencing the establishment of the non-ruminant livestock industry</li> <li>2. Non-ruminant livestock marriage management</li> <li>3. Types of cages, facilities and infrastructure layout in building a non-ruminant livestock industry</li> <li>4. Applications and roles of non-ruminant livestock feed processing technology (physical/chemical/biological/combo)</li> <li>5. Production and reproductive performance in the non-ruminant livestock industry</li> <li>6. Understanding and steps in planning a non-ruminant livestock business (SWOT analysis)</li> <li>7. Development of non-ruminant livestock business</li> <li>8. The concept of the Integrated Farming System in realizing Indonesia's SDGs 2030</li> <li>9. Development of modern technology-based livestock farming</li> <li>10. Government policies on non-ruminant livestock businesses</li> </ol>
<b>Library</b>	<p><b>Main:</b></p> <ol style="list-style-type: none"> <li>1. Akbar, M., E. Rokana and WP Lokapirnasari. 2023. Rabbit Farming Business Management. Nasya Expanding Management: Central Java</li> <li>2. Directorate General of Livestock Production. 2000. Technical Instructions for Horse Farming. Jakarta</li> <li>3. Kadir, IA 2024. Ruminant and Non-Ruminant Animal Science. Indonesian Center for Education and Research Development: Lombok</li> <li>4. Maswarni and N. Rachman. 2014. Horses: Maintenance and Development Management. Andalas Press: Padang</li> <li>5. Soewandi, BDP and C. Talib. 2015. Development of Local Pig Livestock in Indonesia. Wartazoa. 25(1): 39-46</li> <li>6. Sudjarwo, E., Muharlieni and AA Hamiyanti. 2019. Poultry Livestock Production Management. UB Press: Malang</li> <li>7. Wolayan, FR, Bagau, B. And Imbar, MR 2023. Animal Science Industry (Technology in the Feed Industry). Patra Media Grafindo: Bandung</li> </ol>
	<p><b>Supporters:</b></p> <ol style="list-style-type: none"> <li>1. Practical guide book</li> <li>2. National and international journals</li> </ol>

	3. Scientific articles						
<b>Supporting lecturer</b>							
<b>Required Courses</b>	-						
Week 2-	Final ability of each learning stage (Sub-CLO)	Evaluation		Form of Learning; Learning methods; Student Assignments; [ Estimated Time ]		Study Materials (Learning materials)	Assessment Credit (%)
		Indicator	Criteria and Techniques	Asynchronous (5)	Synchronous (6)		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	<p><b>Sub-CLO1:</b></p> <p>After taking this lecture, students will be able to explain the forms of dairy farming (commercial, semi-commercial and traditional) and the factors that influence the establishment of the non-ruminant livestock industry (poultry, rabbits, horses and pigs).</p>	<p>a. Accuracy in explaining the forms of non-ruminant livestock businesses</p> <p>b. Accuracy in explaining the factors that influence the establishment of the non-ruminant</p>	<p><b>Criteria:</b> -</p> <p><b>Technique:</b> <i>Non-Test</i></p>	<p>KM+PT (1 week x 2 credits x 120 minutes)</p> <p><b>Activity:</b></p> <p>1. Attendance absence 2. Download and read the Syllabus (RPS), Learning Implementation Plan (SAP), Course Agreement, and Learning Materials.</p> <p><b>Learning methods:</b> <i>Self-Paced Learning</i></p> <p><b>Mode (Learning Management System):</b> <a href="http://class.usu.ac.id">class.usu.ac.id</a></p>	<p>TM (1 week x 2 credits x 50 minutes)</p> <p><b>Activity:</b></p> <p>1. <i>Offline Learning</i> 2. <i>Class Discussion</i> 3. <i>Note Taking</i></p> <p><b>Media:</b></p> <p>1. <i>Power Point Presentation</i> 2. <i>Text Book</i></p> <p><b>Learning methods:</b></p> <p>1. <i>Lecturer</i> 2. <i>Discussion</i> 3. <i>Self-Paced</i></p>	<p><b>Subject:</b></p> <p>1. Forms of dairy farming:</p> <ul style="list-style-type: none"> <li>- Commercial</li> <li>- Semi commercial</li> <li>- Traditional</li> </ul> <p>2. Factors that influence the establishment of the non-ruminant livestock industry</p>	0%

		livestock industry				
2	<p><b>Sub-CLO 2:</b></p> <p>After taking this lecture, students will be able to explain mating management in non-ruminant livestock.</p>	<p>1. Accuracy in explaining non-ruminant livestock marriage management</p>	<p><b>Criteria:</b> Assessment rubric.</p> <p><b>Technique:</b> <i>Non-Test</i></p>	<p>KM+PT (1 week x 2 credits x 120 minutes)</p> <p><b>Activity:</b> 1.Attendance absence 2.Download and read the Syllabus (RPS), Learning Implementation Plan (SAP), Course Agreement, and Learning Materials. 3.Responding to the opening question 4.Review of the 1st meeting material</p> <p><b>Mode (Learning Management System):</b> class.usu.ac.id</p>	<p>TM (1 week x 2 credits x 50 minutes)</p> <p><b>Activity:</b> 1. <i>Offline Learning</i> 2. <i>Class Discussion</i> 3. <i>Note Taking</i></p> <p><b>Media:</b> 1. <i>Power Point Presentation</i> 2. <i>Text Book</i></p> <p><b>Learning methods:</b> 1. <i>Lecturer</i> 2. <i>Discussion</i> 3. <i>Self-Paced</i></p>	<p><b>Subject:</b> 1. Natural mating system 2. Artificial marriage system</p>
3	<p><b>Sub-CLO 3:</b></p> <p>After taking this lecture, students will be able to explain the types of cages, facilities and</p>	<p>1. Accuracy in explaining the types of cages 2. Accuracy in</p>	<p><b>Criteria:</b> Assessment rubric.</p> <p><b>Technique:</b> <i>Test:</i> 1. Quiz</p>	<p>KM+PT (1 week x 2 credits x 120 minutes)</p> <p><b>Activity:</b> 1.Attendance absence 2.Download and read the Syllabus (RPS),</p>	<p>TM (1 week x 2 credits x 50 minutes)</p> <p><b>Activity:</b> 1. <i>Offline Learning</i> 2. <i>Class Discussion</i></p>	<p><b>Subject:</b> 1. Types of non-ruminant livestock pens (poultry,</p>

This Sub CLO will be assessed during the MID TERM EXAM with a MID TERM EXAM assessment Crediting of (15%).

Quiz 1: 5%

	infrastructure layout in building a non-ruminant livestock industry.	explaining facilities and infrastructure layout in building a non-ruminant livestock industry		<p>Learning Implementation Plan (SAP), Course Agreement, and Learning Materials.</p> <p>3. Responding to the opening question</p> <p>4. Review of the 2nd meeting material</p> <p><b>Quiz 1:</b> Quiz to measure students' understanding at meetings 1-3</p> <p><b>Mode (Learning Management System):</b> <a href="http://class.usu.ac.id">class.usu.ac.id</a></p>	<p>3. <i>Note Taking</i></p> <p><b>Media:</b></p> <ol style="list-style-type: none"> <li>1. <i>Power Point Presentation</i></li> <li>2. <i>Text Book</i></li> </ol> <p><b>Learning methods:</b></p> <ol style="list-style-type: none"> <li>1. <i>Lecturer</i></li> <li>2. <i>Discussion</i></li> <li>3. <i>Self-Paced</i></li> </ol>	<p>horses, rabbits, pigs)</p> <ol style="list-style-type: none"> <li>2. Facilities and infrastructure layout in building a non-ruminant livestock industry</li> </ol>
4 & 5	<p><b>Sub-CLO 4:</b></p> <p>After taking this lecture, students will be able to explain the application and role of non-ruminant livestock feed processing technology</p>	Accuracy in explaining the application and role of non-ruminant livestock feed processing technology (physical/chemical/biologic	<p><b>Criteria:</b> Assessment rubric.</p> <p><b>Technique:</b> <i>Test:</i></p> <ol style="list-style-type: none"> <li>1. Case method</li> </ol>	<p>KM+PT (1 week x 2 credits x 120 minutes)</p> <p><b>Activity:</b></p> <ol style="list-style-type: none"> <li>1. Attendance absence</li> <li>2. Download and read the Syllabus (RPS), Learning Implementation Plan (SAP),</li> </ol>	<p>TM (1 week x 2 credits x 50 minutes)</p> <p><b>Activity:</b></p> <ol style="list-style-type: none"> <li>1. <i>Offline Learning</i></li> <li>2. <i>Class Discussion</i></li> <li>3. <i>Note Taking</i></li> </ol> <p><b>Media:</b></p>	<p><b>Subject:</b> Applications and roles of non-ruminant livestock feed processing technology:</p> <ul style="list-style-type: none"> <li>- Physique</li> <li>- Chemical</li> <li>- Biology</li> </ul>

*Case Method1:*  
12.5%

	(physical/chemical/biological/combo)	al/combinatio		<p>Course Agreement, and Learning Materials.</p> <p>3.Responding to the opening question</p> <p>4.Review of the 3rd meeting material</p> <p><b>Case Method 1:</b></p> <p>1.Divide the groups evenly (the lecturer divides)</p> <p>2.Create a paper on the requirements for hatching eggs, a maximum of 15 pages from the table of contents to the bibliography, TMR font size 12, 1.5 spacing, sent in PDF format.</p> <p>3.Group presentation</p> <p><b>Mode (Learning Management System):</b></p>	<p>1. Power Point Presentation</p> <p>2. Text Book</p> <p><b>Learning methods:</b></p> <p>1. Lecturer</p> <p>2. Discussion</p> <p>3. Self-Paced</p>	- Combinati on
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6 & 7	<b>Sub-CLO 5:</b>			class.usu.ac.id			
	<p>After taking this course, students will be able to explain production and reproductive performance in the non-ruminant livestock industry.</p>	<p>1.Accuracy in explaining the performance of non-ruminant livestock production (meat/milk/ornamental/racing livestock) 2.Accuracy in explaining the reproductive performance of non-ruminant livestock</p>	<p><b>Criteria:</b> Assessment rubric.</p> <p><b>Technique:</b> <i>Test:</i> 1. Case method</p>	<p>KM+PT (1 week x 2 credits x 120 minutes)</p> <p><b>Activity:</b></p> <ol style="list-style-type: none"> <li>Attendance absence</li> <li>Download and read the Syllabus (RPS), Learning Implementation Plan (SAP), Course Agreement, and Learning Materials.</li> <li>Responding to the opening question</li> <li>Review of materials from meetings 4 and 5</li> </ol> <p><b>Case Method 2:</b></p> <ol style="list-style-type: none"> <li>Divide the groups evenly (the lecturer divides)</li> <li>Create a paper on the requirements for hatching eggs, a</li> </ol>	<p>TM (1 week x 2 credits x 50 minutes)</p> <p><b>Activity:</b></p> <ol style="list-style-type: none"> <li>Offline Learning</li> <li>Class Discussion</li> <li>Note Taking</li> </ol> <p><b>Media:</b></p> <ol style="list-style-type: none"> <li>Power Point Presentation</li> <li>Text Book</li> </ol> <p><b>Learning methods:</b></p> <ol style="list-style-type: none"> <li>Lecturer</li> <li>Discussion</li> <li>Self-Paced</li> </ol>	<p><b>Subject:</b></p> <ol style="list-style-type: none"> <li>Performance and production objectives of non-ruminant livestock: <ul style="list-style-type: none"> <li>- Meat</li> <li>- Milk</li> <li>- Ornamental livestock</li> <li>- Agrotourism</li> <li>- Racing cattle</li> </ul> </li> <li>Reproductive performance of non-ruminant livestock</li> </ol>	<p><i>Case Method2:</i> 12.5%</p>

				<p>maximum of 15 pages from the table of contents to the bibliography, TMR font size 12, 1.5 spacing, sent in PDF format.</p> <p>3. Group presentation</p> <p><b>Mode (Learning Management System):</b> class.usu.ac.id</p>			
8	<b>MID SEMESTER EXAMINATION</b>						<b>15%</b>
9	<p><b>Sub-CLO 6:</b></p> <p>After taking this lecture, students will be able to explain the steps in planning a non-ruminant livestock business (SWOT analysis)</p>	<p>Accuracy in explaining the steps for planning a non-ruminant livestock business using SWOT analysis</p>	<p><b>Criteria:</b> Assessment rubric.</p> <p><b>Technique:</b> <i>Non-Test</i></p>	<p>KM+PT (1 week x 2 credits x 120 minutes)</p> <p><b>Activity:</b></p> <p>1. Attendance absence 2. Download and read the Syllabus (RPS), Learning Implementation Plan (SAP), Course Agreement, and Learning Materials.</p>	<p>TM (1 week x 2 credits x 50 minutes)</p> <p><b>Activity:</b></p> <p>1. <i>Offline Learning</i> 2. <i>Class Discussion</i> 3. <i>Note Taking</i></p> <p><b>Media:</b></p> <p>1. <i>Power Point Presentation</i></p>	<p><b>Subject:</b></p> <p>1. Understanding non-ruminant livestock business planning 2. Steps for planning</p>	<p>This Sub CLO will be assessed during the FINAL EXAM with a FINAL EXAM assessment Crediting of 15%.</p>

				<p>3. Responding to the opening question</p> <p>4. Review of mid-term exam questions</p> <p><b>Mode (Learning Management System):</b> class.usu.ac.id</p>	<p>2. <i>Text Book</i></p> <p><b>Learning methods:</b></p> <p>1. <i>Lecturer</i></p> <p>2. <i>Discussion</i></p> <p>3. <i>Self-Paced</i></p>	<p>a non-ruminant livestock business (SWOT analysis)</p>	
10 & 11	<p><b>Sub-CLO 7:</b></p> <p>After taking this lecture, students will be able to explain the development of non-ruminant livestock businesses.</p>	<p>Accuracy in explaining non-ruminant livestock businesses by involving various stakeholders</p>	<p><b>Criteria:</b> Assessment rubric.</p> <p><b>Technique:</b> <i>Test:</i></p> <p>1. <i>Case Method</i></p>	<p>KM+PT (1 week x 2 credits x 120 minutes)</p> <p><b>Activity:</b></p> <p>1. Attendance absence</p> <p>2. Download and read the Syllabus (RPS), Learning Implementation Plan (SAP), Course Agreement and Learning Materials</p> <p>3. Responding to the opening question</p> <p>4. Review of the 9th meeting material</p>	<p>TM (1 week x 2 credits x 50 minutes)</p> <p><b>Activity:</b></p> <p>1. <i>Offline Learning</i></p> <p>2. <i>Class Discussion</i></p> <p>3. <i>Note Taking</i></p> <p><b>Media:</b></p> <p>1. <i>Power Point Presentation</i></p> <p>2. <i>Text Book</i></p> <p><b>Learning methods:</b></p> <p>1. <i>Lecturer</i></p> <p>2. <i>Discussion</i></p> <p>3. <i>Self-Paced</i></p>	<p><b>Subject:</b> Development of non-ruminant livestock businesses by involving various stakeholders</p>	<p><i>Case Method3:</i> 12.5%</p>

				<p><b>Case Method 3:</b></p> <ol style="list-style-type: none"> <li>1. Divide the groups evenly (the lecturer divides)</li> <li>2. Create a hatchery management paper with a maximum of 15 pages from the table of contents to the bibliography, TMR font size 12, 1.5 spacing, sent in PDF format.</li> </ol> <p><b>Mode (Learning Management System):</b> class.usu.ac.id</p>		
12	<p><b>Sub-CLO 8:</b></p> <p>After taking this lecture, students will be able to explain the Integrated Farming System in realizing Indonesia's SDGs 2030.</p>	<p>Accuracy in explaining the concept of Integrated Farming System in realizing Indonesia's SDGs 2030</p>	<p><b>Criteria:</b> Assessment rubric.</p> <p><b>Technique:</b> <i>Test:</i></p> <ol style="list-style-type: none"> <li>1. Quiz</li> </ol>	<p>KM+PT (1 week x 2 credits x 120 minutes)</p> <p><b>Activity:</b></p> <ol style="list-style-type: none"> <li>1. Attendance absence</li> <li>2. Download and read the Syllabus (RPS), Learning Implementation</li> </ol>	<p>TM (1 week x 2 credits x 50 minutes)</p> <p><b>Activity:</b></p> <ol style="list-style-type: none"> <li>1. <i>Offline Learning</i></li> <li>2. <i>Class Discussion</i></li> <li>3. <i>Note Taking</i></li> </ol>	<p><b>Subject:</b> The concept of the Integrated Farming System in realizing Indonesia's SDGs 2030</p> <p>Quiz 2: 5%</p>

				Plan (SAP), Course Agreement, and Learning Materials. 3. Responding to the opening question 4. Review of the 9th meeting material  <b>Quiz 2:</b> Quiz to measure students' understanding at lecture meetings 9-12  <b>Mode (Learning          Management          System):</b> class.usu.ac.id	<b>Media:</b> 1. Power Point Presentation 2. Text Book  <b>Learning          methods:</b> 1. Lecturer 2. Discussion 3. Self-Paced		
13 & 14	<b>Sub-CLO 9:</b>  After taking this lecture, students will be able to explain the development of modern non-ruminant livestock farming based on technology.	Accuracy in explaining the development of modern non-ruminant livestock farming	<b>Criteria:</b> Assessment rubric.  <b>Technique:</b> <i>Non-Test:</i>	KM+PT (1 week x 2 credits x 120 minutes) <b>Activity:</b> 1. Attendance absence 2. Download and read the Syllabus (RPS), Learning	TM (1 week x 2 credits x 50 minutes) <b>Activity:</b> 1. <i>Offline Learning</i> 2. <i>Class Discussion</i> 3. <i>Note Taking</i>	<b>Subject:</b> Development of modern technology-ba sed livestock farming	This Sub CLO will be assessed during the FINAL EXAM with a FINAL EXAM assessment

		based on technology		<p>Implementation Plan (SAP), Course Agreement, and Learning Materials.</p> <p>3. Responding to the opening question</p> <p>4. Review of the 12th meeting material</p> <p><b>Mode (Learning Management System):</b> class.usu.ac.id</p>	<p><b>Media:</b></p> <ol style="list-style-type: none"> <li>1. Power Point Presentation</li> <li>2. Text Book</li> </ol> <p><b>Learning methods:</b></p> <ol style="list-style-type: none"> <li>1. Lecturer</li> <li>2. Discussion</li> <li>3. Self-Paced</li> </ol>		Crediting of 15%.
15	<p><b>Sub-CLO 10:</b></p> <p>After taking this course, students will be able to explain government policies on non-ruminant livestock businesses.</p>	Accuracy in explaining government policies on non-ruminant livestock businesses	<p><b>Criteria:</b> Assessment rubric.</p> <p><b>Technique:</b> <i>Non-Test:</i></p>	<p>KM+PT (1 week x 2 credits x 120 minutes)</p> <p><b>Activity:</b></p> <ol style="list-style-type: none"> <li>1. Attendance absence</li> <li>2. Download and read the Syllabus (RPS), Learning Implementation Plan (SAP), Course Agreement and Learning Materials</li> </ol>	<p>TM (1 week x 2 credits x 50 minutes)</p> <p><b>Activity:</b></p> <ol style="list-style-type: none"> <li>1. Offline Learning</li> <li>2. Class Discussion</li> <li>3. Note Taking</li> </ol> <p><b>Media:</b></p> <ol style="list-style-type: none"> <li>1. Power Point Presentation</li> <li>2. Text Book</li> </ol>	<p><b>Subject:</b> Government policies on non-ruminant livestock businesses</p>	<p>This Sub CLO will be assessed during the FINAL EXAM with a FINAL EXAM assessment Crediting of 15%.</p>

			3. Responding to the opening question 4. Review of materials from meetings 13 and 14	<b>Learning methods:</b> 1. <i>Lecturer</i> 2. <i>Discussion</i> 3. <i>Self-Paced</i>		
16	<b>FINAL SEMESTER EXAMINATION</b>					15%

**Assessment Design:**

CLO Code and Percentage	Sub-CLO Code	Evaluation Form	Percentage (%)	Total	Implementation of Evaluation
<b>CLO0218(13.96%)</b>	Sub-CLO1	MID TERM EXAM	1.11	13.96	Week 8
	Sub-CLO2	MID TERM EXAM	1.11		Week 8
	Sub-CLO3	Quiz	0.66		Week 3
	Sub-CLO4	Project Based Learning	2.27		Week 7
	Sub-CLO5	Project Based Learning	2.27		Week 7
	Sub-CLO6	MID TERM EXAM	1.11		Week 8

	Sub-CLO7	Project Based Learning	2.27		Week 8
	Sub-CLO8	Quiz	0.66		Week 12
	Sub-CLO9	FINAL EXAM	1.25		Week 15
	Sub-CLO10	FINAL EXAM	1.25		Week 15
<b>CLO0343(12.85%)</b>	Sub-CLO2	MID TERM EXAM	1.11	12.85	Week 8
	Sub-CLO3	Quiz	0.66		Week 3
	Sub-CLO4	Project Based Learning	2.27		Week 7
	Sub-CLO5	Project Based Learning	2.27		Week 7
	Sub-CLO6	MID TERM EXAM	1.11		Week 8
	Sub-CLO7	Project Based Learning	2.27		Week 8
	Sub-CLO8	Quiz	0.66		Week 12
	Sub-CLO9	FINAL EXAM	1.25		Week 15
	Sub-CLO10	FINAL EXAM	1.25		Week 15
<b>CLO0637(13.96%)</b>	Sub-CLO2	MID TERM EXAM	1.11	13.96	Week 8
	Sub-CLO3	Quiz	0.66		Week 3
	Sub-CLO4	Project Based Learning	2.27		Week 7
	Sub-CLO5	Project Based Learning	2.27		Week 7

	Sub-CLO6	MID TERM EXAM	1.11		Week 8
	Sub-CLO7	Project Based Learning	2.27		Week 8
	Sub-CLO8	Quiz	0.66		Week 12
	Sub-CLO9	FINAL EXAM	1.25		Week 15
	Sub-CLO10	FINAL EXAM	1.25		Week 15
	Sub-CLO2	MID TERM EXAM	1.11		Week 8
<b>CLO0825 (12.85%)</b>	Sub-CLO2	MID TERM EXAM	1.11	12.85	Week 8
	Sub-CLO3	Quiz	0.66		Week 3
	Sub-CLO4	Project Based Learning	2.27		Week 7
	Sub-CLO5	Project Based Learning	2.27		Week 7
	Sub-CLO6	MID TERM EXAM	1.11		Week 8
	Sub-CLO7	Project Based Learning	2.27		Week 8
	Sub-CLO8	Quiz	0.66		Week 12
	Sub-CLO9	FINAL EXAM	1.25		Week 15
	Sub-CLO10	FINAL EXAM	1.25		Week 15
<b>CLO0918(12.85%)</b>	Sub-CLO2	MID TERM EXAM	1.11	12.85	Week 8
	Sub-CLO3	Quiz	0.66		Week 3

	Sub-CLO4	Project Based Learning	2.27		Week 7
	Sub-CLO5	Project Based Learning	2.27		Week 7
	Sub-CLO6	MID TERM EXAM	1.11		Week 8
	Sub-CLO7	Project Based Learning	2.27		Week 8
	Sub-CLO8	Quiz	0.66		Week 12
	Sub-CLO9	FINAL EXAM	1.25		Week 15
	Sub-CLO10	FINAL EXAM	1.25		Week 15
<b>CLO1016 (12.85%)</b>	Sub-CLO2	MID TERM EXAM	1.11	12.85	Week 8
	Sub-CLO3	Quiz	0.66		Week 3
	Sub-CLO4	Project Based Learning	2.27		Week 7
	Sub-CLO5	Project Based Learning	2.27		Week 7
	Sub-CLO6	MID TERM EXAM	1.11		Week 8
	Sub-CLO7	Project Based Learning	2.27		Week 8
	Sub-CLO8	Quiz	0.66		Week 12
	Sub-CLO9	FINAL EXAM	1.25		Week 15
	Sub-CLO10	FINAL EXAM	1.25		Week 15
<b>CLO1138</b>	Sub-CLO1	MID TERM EXAM	1.11	7.65	Week 8

<b>(7.65%)</b>	Sub-CLO6	MID TERM EXAM	1.11		Week 8
	Sub-CLO7	Project Based Learning	2.27		Week 8
	Sub-CLO8	Quiz	0.66		Week 12
	Sub-CLO9	FINAL EXAM	1.25		Week 15
	Sub-CLO10	FINAL EXAM	1.25		Week 15
<b>CLO1226 (12.85%)</b>	Sub-CLO2	MID TERM EXAM	1.11	12.85	Week 8
	Sub-CLO3	Quiz	0.66		Week 3
	Sub-CLO4	Project Based Learning	2.27		Week 7
	Sub-CLO5	Project Based Learning	2.27		Week 7
	Sub-CLO6	MID TERM EXAM	1.11		Week 8
	Sub-CLO7	Project Based Learning	2.27		Week 8
	Sub-CLO8	Quiz	0.66		Week 12
	Sub-CLO9	FINAL EXAM	1.25		Week 15
	Sub-CLO10	FINAL EXAM	1.25		Week 15
<b>Total</b>			<b>100%</b>	<b>100%</b>	



**Assessment Plan:**

Evaluation Form	Sub-CLO	Assessment Instrument [Frequency]		Invoice (proof)	Assessment Credit (%)
		Formative	Summative		
<b>Quiz/Q&amp;A</b>	Sub-CLO3 and Sub-CLO8	Assessment rubric [2 times]	-	Quiz answers uploaded to kelas.usu.ac.id	5
<b>Assignment</b>	Sub-CLO8	Assessment rubric [2 times]	-	Assignment answers uploaded to kelas.usu.ac.id	5
<b>Project Based Learning</b>	Sub-CLO4, Sub-CLO5 and Sub-CLO7	Feedback results case analysis [3 times]	Assessment rubric [2 times]	Logbook/worksheet/slides uploaded to kelas.usu.ac.id	30
<b>Case Method</b>	Sub-CLO4, Sub-CLO5 and Sub-CLO7	Feedback results case analysis [2 times]	Assessment rubric [2 times]	Logbook/worksheet/slides uploaded to kelas.usu.ac.id	20
<b>Written exam 1 (MID TERM EXAM)</b>	Sub-CLO1, Sub-CLO2, Sub-CLO3, Sub-CLO4 and Sub-CLO5	-	Assessment rubric [1 time]	Written exam result sheet	20
<b>Written exam 2 (FINAL EXAM)</b>	Sub-CLO6, Sub-CLO7, Sub-CLO8, Sub-CLO9 and Sub-CLO10	-	Assessment rubric [1 time]	Written exam result sheet	20

<b>Total</b>	<b>100%</b>
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**Explanation:**

## a) Quiz 5%

During the semester there will be 2 quizzes held in class. The quizzes will be conducted via e-learning and have been scheduled in advance. The material being tested is announced by the lecturer and written in the RPS.

## b) Assignment 5%

During the semester there will be 1 structured assignments. The assignment given is an effort to add insight by making a resume related to the material written in the RPS.

## c) Project-based learning 30%

During the semester there will be case methods, each student will make a paper and report on each case method in groups. Project based learning in this course is conducted 1 times. The papers that have been made will be presented by students. Students will be assessed according to their participation in the presentation and accuracy in the presentation, as well as their participation in the question and answer session when other groups present.

## d) Case Method 20%

During the semester there will be case methods, each student will make a paper and report on each case method in groups. Case method in this course is conducted 1 time. The papers that have been made will be presented by students. Students will be assessed according to their participation in the presentation and accuracy in the presentation, as well as their participation in the question and answer session when other groups present.

## e) Mid-semester exam (UTS) (mid-test) 20%

The midterm exam covers all the material that has been covered since the beginning of the semester until the 7th meeting both reading and lectures. This exam is conducted in class with multiple choice, short form, and essay questions.

## f) Final-semester exam (UAS) (final-test) 20%

The end-of-semester exam covers all the material that has been covered from the 9th to the 15th meeting, both readings and lectures. This exam is conducted in class with multiple choice, short form, and essay questions.

**Post Test Quiz Assessment Rubric (10%)**

The Pre/Post test questions consist of 5 essay questions done on one sheet of paper (done 4 times during 1 semester)

Value per question item	Criteria
20	Can answer questions correctly, complete the steps correctly, and completely correct
15	The steps for completing the questions are correct, there are a few errors.
10	Most of the steps in completing the questions are correct, there are many errors.
5	The steps for completing the question are not correct, the question cannot be completed

**\*Maximum score = 100 (5 questions x 20 points)**

**Minimum score = 25 (5 questions x 5 points)**

Quiz score 1: (maximum score is 100)  $20 \times \sum \text{nilai per butir soal}$

Quiz score 2: (maximum score is 100)  $20 \times \sum \text{nilai per butir soal}$

**Total score if you take all post-test quizzes with a perfect score is  $200 \times 10\%[\text{quiz percentage}] = 20$**

**Assessment Rubric for Group Presentation Assignment Case Method Knowledge of Livestock Products**

Matter	Evaluation criteria				
Contents	Complete, with additional good material (20)	Complete (18)	Same as text book (16)	Not complete, but most of the material is covered (14)	Substantially incomplete (12)

Answering Discussion Questions	Able to answer all questions correctly (20)	Can answer most of the questions correctly but there are some questions that are not answered (18)	Able to answer some questions correctly, some others did not reach the target and there were questions that were not answered (16)	Most of the answers did not reach the target and there were unanswered questions (14)	Can't answer all questions (12)
Presentation	Clear, concise with good flow (20)	Clear, concise with sometimes poor flow (18)	Moderate presentation skills (16)	Presentation stutters (14)	Presentation not working (12)
Group organization	Very good organization, supporting each other's presentations (20)	Good organization (18)	Medium organization, some people are less organized (16)	Lack of organization often results in communication errors (14)	The organization was chaotic so the presentation was very disrupted (12)
Creativity	Very creative without going off target (20)	Creative creates enthusiasm (18)	Occasionally attracts attention (15)	Occasionally attracts attention (13)	Boring, makes you sleepy (11)
<b>TOTAL</b>	<b>100</b> <b>(Very Good)</b>	<b>90-80</b> <b>(Very well)</b>	<b>79-70</b> <b>(Good)</b>	<b>69-50</b> <b>(Pretty good)</b>	<b>59-40</b> <b>(Not good)</b>

**Information :**

The total maximum score is 100. The numbers in brackets are the scores for each criterion. The number 100 will later be accumulated with the percentage of the Presentation Assignment (PjBL) value of 50%.

$100 \times 50\% = 50$  points

There are 4 presentation implementations (case method), so the percentage of the Case Method Group Assignment score for each implementation is:  $50\% : 4 = 12.5\%$ . Points for each implementation of the Case Method Group Assignment:  $100 \times 12.5\% = 12.5$  points.

**Essay Exam Assessment Rubric:**

<b>Assessment criteria</b>	<b>4 Very good</b>	<b>3 Good</b>	<b>2 Enough</b>	<b>1 Not enough</b>
<b>Understanding the Questions</b>	Understand the question exactly once (25)	Understanding the questions (20)	Not understanding the question fully and correctly (15)	Don't understand the question (10)
<b>Contents</b>	Answers show understanding  in-depth understanding of the material being asked and participants integrate the information that has been studied and/or assigned to be read during the lecture well and appropriately (25)	The answers demonstrate understanding of the material being asked and integrate some of the information that has been studied and/or assigned to be read during the lecture. (20)	The answer shows a lack of understanding of the material being asked and only integrates a small portion of information that has been studied and/or assigned to be read during lectures. (15)	The answer shows a lack of understanding of the material being asked so it is unclear and not integrated.  information that has been studied and/or assigned to be read during lectures. (10)
<b>Clarity of Writing</b>	All written ideas are conveyed well and clearly. (25)	Most of the ideas in the writing are well and clearly conveyed. (20)	Some of the ideas in the writing are conveyed well and clearly. (15)	The ideas in the writing are not conveyed well and clearly. (10)
<b>Clarity of Language</b>	Uses foreign/Indonesian languages well and correctly with minimal grammatical errors and word choices that do not interfere with understanding	Uses foreign/Indonesian languages well and correctly with minimal grammatical errors and word choices that interfere with understanding. (20)	Uses foreign/Indonesian language quite well and correctly with some grammatical errors and word choices (15)	Does not use foreign/Indonesian language properly and correctly because the writing contains many grammatical errors and word choices

	(25)			(10)
<b>Total</b>	<b>81-100</b> <b>(Very well)</b>	<b>61-80</b> <b>(Pretty good)</b>	<b>41-60</b> <b>(Enough)</b>	<b>0-40</b> <b>(Not enough)</b>

**Multiple Choice Exam Scoring Rubric:**

<b>Value per question item</b>	<b>Criteria</b>
100/ many questions	Can answer questions correctly
0	The answer is not quite right/does not match the answer key provided.

