



**UNIVERSITAS SUMATERA UTARA (USU)**  
**FACULTY OF AGRICULTURE**  
**Animal Sciences Study Program**

**Document Code**  
(To follow)

**SEMESTER LEARNING PLAN (RPS)**

COURSE (MK)	CODE	Course Group	WEIGHT (credits)	SEMESTER	Date of Preparation
Dairy Cattle Nutrition Sciences	PTN3216	Exact	Theory = 2 Practice = 1	V	1 December 20
<b>AUTHORISATION/ ATTESTATION</b>	<b>RPS Developer Lecturer</b>		<b>Approved Head of Study Programme</b>		<b>Chairman of LINK-UP USU</b>
	Dr. Usman Budi, S.Pt., M.Si Galih Ari Wirawan Siregar, S.Pt., M.Si Uswatun Hasanah, S.Pt., M.Si		Dr. Ir. Ma'ruf Tafsin, M.Si., IPM.		Prof. Dr. Dwi Suryanto M.Sc.
<b>Learning Outcomes</b>	<b>LO-Study Programs Charged to the Course</b>				
	LO03	Able to identify, formulate, and find solutions to problems related to livestock			
	LO06	Supervise and evaluate the completion of assigned work and be able to manage learning independently throughout life			
	LO09	Able to manage and implement aspects of efficient feed supply and technology			
	LO11	Able to develop and understand and apply a variety of best techniques and methods that combine theory and practice related to animal husbandry expertise			
	<b>Course Learning Outcomes (CLO)</b>				<b>CLO Weight</b>
	CLO0324: Able to explain the basic benchmark of dairy farmers' nutritional needs				27.58%
	CLO0621: Able to make an analysis of variability of nutritional needs and deficiencies in dairy farms				24.13%
	CLO0911: Able to prepare rations that suit the needs/status of dairy farmers				27.58%
	CLO1125: Able to apply the latest scientific developments in dairy nutrition				20.69%

	<b>Final Ability of Each Learning Stage (Sub-CLO)</b>											
	Sub-CLO1	After taking this course, students will be able to explain Introduction to Dairy Nutrition										
	Sub-CLO2	After taking this course, students will be able to explain the Anatomy and Physiology of the Digestive System of Dairy Cows										
	Sub-CLO3	After taking this course, students will be able to calculate Basic Nutritional Needs in Dairy Cows										
	Sub-CLO4	After taking this course, students will be able to explain the Evaluation of Feed Ingredients for Dairy Cows										
	Sub-CLO5	After taking this course, students will be able to prepare a Ration Formulation for Dairy Cows										
	Sub-CLO6	After taking this course, students will be able to explain the Effect of Nutrition on Milk Production										
	Sub-CLO7	After taking this course, students will be able to explain Feed Technology for Dairy Cows										
	Sub-CLO8	After taking this course, students will be able to explain Feeding Management										
	Sub-CLO9	After taking this course, students will be able to explain Nutrient Metabolism, health and nutrition in Dairy Cows										
	Sub-CLO10	After taking this course, students will be able to explain Nutrition in the Lactation Phase										
	Sub-CLO11	After taking this course, students will be able to explain Trends and Innovations in Dairy Nutrition										
<b>Correlation between CLO and Sub-CLO</b>		<b>Sub-CLO1</b>	<b>Sub-CL O2</b>	<b>Sub-CL O3</b>	<b>Sub-CLO4</b>	<b>Sub-CL O5</b>	<b>Sub-CLO6</b>	<b>Sub-CLO7</b>	<b>Sub-CLO8</b>	<b>Sub-CL O9</b>	<b>Sub-CL O10</b>	<b>Sub-CLO11</b>
	CLO0324	√	√	√		√	√		√	√		√
	CLO0621		√		√	√	√		√	√	√	
	CLO0911	√		√	√	√	√	√		√	√	√
	CLO1125			√	√		√	√				√
<b>Brief Description of Courses</b>	After completing the Dairy Nutrition Science course for students in the sixth semester, Animal Husbandry Study Program, Faculty of Agriculture, University of North Sumatra, it is expected to be able to explain about dairy feed, feeding management, feed technology in cattle, calculation of dairy nutrition needs. This course is conducted with Indonesian as the language of instruction, and face-to-face as many as 14 meetings consisting of material presentations, case methods and project-based learning, quizzes, assignments, and practicum both offline and online.											
<b>Study Material:</b>	<b>BK04 Nutrition and Feed Science</b>											

Learning Materials	<ol style="list-style-type: none"> <li>1. Introduction to Dairy Nutrition</li> <li>2. Anatomy and Physiology of the Digestive System of Dairy Cows</li> <li>3. Basic Nutritional Needs in Dairy Cows</li> <li>4. Evaluation of Feed Ingredients for Dairy Cows</li> <li>5. Ration Formulation for Dairy Cows</li> <li>6. Effect of Nutrition on Milk Production</li> <li>7. Feed Technology for Dairy Cows</li> <li>8. Feeding Management</li> <li>9. Nutrient Metabolism in Dairy Cows</li> <li>10. Health and Nutrition in Dairy Cows</li> <li>11. Nutrition in the Lactation Phase</li> <li>12. Nutrients in the Dry and Pregnant Phases</li> <li>13. Sustainability in Dairy Nutrition</li> <li>14. Trends and Innovations in Dairy Nutrition Gen</li> </ol>
<b>Book</b>	<p><b>Main:</b></p> <ol style="list-style-type: none"> <li>1. Baldwin, R. L. (2016). Ruminant nutrition and physiology. Springer.</li> <li>2. Chilliard, Y., Ferlay, A., &amp; Rouel, J. (2017). Nutrition and milk fat synthesis in dairy cows. Elsevier.</li> <li>3. Dijkstra, J., Forbes, J. M., &amp; France, J. (2018). Quantitative aspects of ruminant digestion and metabolism (2nd ed.). C Publishing.</li> <li>4. FAO. (2020). Dairy cattle feeding and nutrition guidelines. Food and Agriculture Organization of the United Nations.</li> <li>5. Goff, J. P., &amp; Horst, R. L. (2019). Calcium and metabolic disorders in dairy cows. Academic Press.</li> <li>6. NRC. (2021). Nutrient requirements of dairy cattle (8th ed.). National Academies Press.</li> <li>7. Pulina, G., &amp; Rossi, R. (2016). Dairy nutrition management. Wageningen Academic Publishers.</li> <li>8. Van Soest, P. J. (2017). Nutritional ecology of the ruminant. Cornell University Press.</li> <li>9. Walstra, P., Wouters, J. T. M., &amp; Geurts, T. J. (2020). Dairy science and technology. CRC Press.</li> <li>10. Zinn, R. A., &amp; Owens, F. N. (2018). Feed efficiency and energy metabolism in dairy cows. Elsevier.</li> </ol>
	<p><b>Supporter:</b></p> <ol style="list-style-type: none"> <li>1. Practicum module</li> <li>2. National and international journals</li> </ol>
<b>Lecturer</b>	<ol style="list-style-type: none"> <li>1. Dr. Usman Budi, S.Pt., M.Si</li> </ol>

		2. Galih Ari Wirawan Siregar, S.Pt., M.Si 3. Uswatun Hasanah, S.Pt., M.Si					
<b>Conditional Courses</b>							
	Final ability of each stage of learning (Sub-CLO)	Valuation		Forms of Learning; Learning Methods; Student Assignment; [ Estimated Time ]		Study Materials (Learning Materials)	Assessment Weight (%)
		Indicators	Criteria and Techniques	Asynchronous (5)	Synchronous (6)		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	Sub-CLO1: After taking this course, students will be able to explain Introduction to Dairy Nutrition	a. Accuracy in explaining the term, usefulness of dairy nutrition science b. Accuracy in explaining the role of dairy nutrition science	<b>Criterion:</b> Essay and multiple-choice assessment rubric  <b>Technique:</b> <i>Test</i>	<b>KM+PT</b> (1 week x 3 credits x 120 minutes)  <b>Learning Methods:</b> <i>Self-Paced Learning</i>  <b>Activities:</b> a. Attendance b. Download and read Syllabus (RPS), Learning Implementation Plan (SAP), Course Agreement, and Learning Materials	<b>TM</b> (1 week x 2 credits x 50 minutes)  <b>Learning Methods:</b> a. Lecture b. Discussion  <b>Activities:</b> a. Online/ offline learning b. Class discussion c. Take notes on learning materials  <b>Media:</b> a. Slides/ ppt b. Zoom meeting/ LCD	<b>Subject Matter:</b> a. Terms, uses of dairy nutrition science b. The role of dairy nutrition science	5% (CLO1)

				<b>Moda (Learning Management System):</b> kelas.usu.ac.id	c. Text book	
2	<b>Sub-CLO 2:</b>  After taking this course, students will be able to explain the Anatomy and Physiology of the Digestive System of Dairy Cows	a. Accuracy in explaining the anatomy of the digestive system of dairy cattle b. Accuracy in explaining the function of each dairy digestive system c. Accuracy in explaining the function of the digestive organs in digesting feed	<b>Criterion:</b> Essay Assessment Rubric  <b>Technique:</b> <i>Test:</i> Quiz	<b>KM+PT</b> (2 weeks x 3 credits x 120 minutes)  <b>Learning Methods:</b> <i>Self-Paced Learning</i>  <b>Activities:</b> a. Recording attendance b. Completing quiz  <b>Quiz 1:</b> Quiz to measure students' understanding of the digestive system of dairy cattle  <b>Moda (Learning Management System):</b> kelas.usu.ac.id	TM (2 weeks x 2 credits x 50 minutes)  <b>Learning Methods:</b> a. Lecture b. Discussion  <b>Activities:</b> a. Online/ offline learning b. Class discussion c. Take notes on learning materials  <b>Media:</b> a. Slides/ ppt b. Zoom meeting/ LCD a. Text book	<b>Subject Matter:</b> a. Digestive organs b. Digestive system
3-4	<b>Sub-CLO 3:</b>  After taking this course, students will be able to calculate Basic Nutritional Needs in Dairy Cows	a. Accuracy in explaining the structure of types of dairy feed b. Accuracy in describing dairy feed groups	<b>Criterion:</b> Rubric of paper assessment  <b>Technique:</b> <i>Non-test:</i> Assignment	<b>KM+PT</b> (2 weeks x 3 credits x 120 minutes)  <b>Learning Methods:</b> <i>Self-Paced Learning</i>  <b>Activities:</b>	TM (2 weeks x 2 credits x 50 minutes)  <b>Learning Methods:</b> a. Lecture b. Discussion  <b>Activities:</b>	<b>Subject Matter:</b> a. Types of feed b. Feed group c. Dairy needs d. Calculation of nutritional needs of dairy farmers

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		<p>c. Accuracy in explaining nutritional needs</p> <p>d. Accuracy in calculating the nutritional needs of dairy cattle (lactated and non-lactated livestock)</p>		<p><i>a. Recording attendance</i></p> <p><i>b. Completing assignment</i></p> <p><b>Assignment 1:</b> Create a resume of the structure and function of DNA and RNA (pictures &amp; descriptions), collected in pdf form</p> <p><b>Moda (Learning Management System):</b> kelas.usu.ac.id</p>	<p>a. Online/ offline learning</p> <p>b. Class discussion</p> <p>c. Take notes on learning materials</p> <p>d. Presentation</p> <p><b>Media:</b></p> <p>a. Slides/ ppt</p> <p>b. Zoom meeting/ LCD</p> <p>c. Text book</p>	
5-6	<p>Sub-CLO 4:</p> <p>After taking this course, students will be able to explain the Evaluation of Feed Ingredients for Dairy Cows</p>	<p>a. Accuracy in explaining the meaning of feed</p> <p>b. Accuracy in explaining the evaluation of dairy feeding</p> <p>c. Accuracy in conducting short-term feed evaluations</p>	<p><b>Criterion:</b> Using the presentation and paper assessment rubric</p> <p><b>Technique:</b> <i>Non-Test: Case Method &amp; Project Based Learning</i></p>	<p>KM+PT (1 week x 3 credits x 120 minutes)</p> <p><b>Learning Methods:</b> <i>Self-Paced Learning</i></p> <p><b>Activities:</b></p> <p><i>a. Recording attendance</i></p> <p><i>b. Completing assignment</i></p> <p><i>c. Practicum</i></p> <p><b>Problem Based Learning 1:</b></p> <p>a. Lecturers divide students into several groups.</p>	<p>TM (1 week x 2 credits x 50 minutes)</p> <p><b>Learning Methods:</b></p> <p>a. Lecture</p> <p>b. Discussion</p> <p><b>Activities:</b></p> <p>a. Online/ offline learning</p> <p>b. Class discussion</p> <p>c. Take notes on learning materials</p> <p><b>Media:</b></p> <p>a. Slides/ ppt</p> <p>b. Zoom meeting/ LCD</p>	<p><b>Subject Matter:</b></p> <p>a. Dairy feed</p> <p>b. Definition of dairy feed evaluation</p> <p>c. Animal feed evaluation group</p> <p>d. Evaluation of short-term feed</p>

				b. Conducting practicum to traditional scale dairy farms. c. Making a practicum report on short-term feeding evaluation  <b>Moda (Learning Management System):</b> kelas.usu.ac.id	c. Text book	
7	Sub-CLO 5:  After taking this course, students will be able to prepare a Ration Formulation for Dairy Cows	Accuracy in compiling ration formulations for dairy cattle	<b>Criterion:</b> Using the essay and multiple-choice assessment rubrics  <b>Technique:</b> <i>Test</i>	KM+PT (1 week x 3 credits x 120 minutes)  <b>Learning Methods:</b> <i>Self-Paced Learning</i>  <b>Activities:</b> a. <i>Recording attendance</i> b. <i>Practicum</i>  <b>Moda (Learning Management System):</b> kelas.usu.ac.id	TM (1 week x 2 credits x 50 minutes)  <b>Learning Methods:</b> a. Lecture b. Discussion  <b>Activities:</b> a. Online/ offline learning b. Class discussion c. Take notes on learning materials  <b>Media:</b> a. Slides/ ppt b. Zoom meeting/ LCD c. Text book	<b>Subject Matter:</b> Formulation of dairy cattle rations
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9	Sub-CLO 6:	Precision in the effect of	<b>Criterion:</b>	KM+PT (2 weeks x 3 credits x 120 minutes)	TM (1 week x 2 credits x 50 minutes)	<b>Subject Matter:</b> Quiz 2.5

	After taking this course, students will be able to explain the Effect of Nutrition on Milk Production	nutrition on milk production	Rubric of paper assessment  <b>Technique:</b> <i>Test:</i> <i>Quiz</i>	<b>Learning Methods:</b> <i>Self-Paced Learning</i>  <b>Activities:</b> <i>a. Recording attendance</i> <i>b. Completing assignment</i> <i>c. Practicum</i>  <b>Quiz 2:</b> Quizzes to measure students' understanding of Hardy-Weinberg's likelihood through calculations in several cases  <b>Moda (Learning Management System):</b> kelas.usu.ac.id	<b>Learning Methods:</b> a. Lecture b. Discussion  <b>Activities:</b> a. Online/ offline learning b. Class discussion c. Take notes on learning materials  <b>Media:</b> a. Slides/ ppt b. Zoom meeting/ LCD c. Text book		(CLO & CLO
10	Sub-CLO 7:  After taking this course, students will be able to explain Feed Technology for Dairy Cows	a. Accuracy in explaining the role of feed technology in dairy productivity	<b>Criterion:</b> Using the essay and multiple-choice assessment rubrics  <b>Technique:</b> <i>Test</i>	KM+PT (2 weeks x 3 credits x 120 minutes)  <b>Learning Methods:</b> <i>Self-Paced Learning</i>  <b>Activities:</b> <i>a. Recording attendance</i>	TM (1 week x 2 credits x 50 minutes)  <b>Learning Methods:</b> a. Lecture b. Discussion  <b>Activities:</b> a. Online/ offline learning	<b>Subject Matter:</b> Dairy feed technology	This sub-C will asses duri UA (20% (CLO & C 112

				<b>Moda (Learning Management System):</b> kelas.usu.ac.id	b. Class discussion c. Take notes on learning materials  <b>Media:</b> a. Slides/ ppt b. Zoom meeting/ LCD c. Text book		
11	<b>Sub-CLO 8:</b>  After taking this course, students will be able to explain Feeding Management	a. Accuracy in the management of feeding dairy cattle	<b>Criterion:</b> Essay assessment rubric  <b>Technique:</b> <i>Non-test:</i> Assignment	KM+PT (2 weeks x 3 credits x 120 minutes)  <b>Learning Methods:</b> <i>Self-Paced Learning</i>  <b>Activities:</b> a. Recording attendance b. Completing assignment  <b>Assignment 2:</b> Resume journals on chained genes and collected in pdf form.  <b>Moda (Learning Management System):</b> kelas.usu.ac.id	TM (1 week x 2 credits x 50 minutes)  <b>Learning Methods:</b> a. Lecture b. Discussion  <b>Activities:</b> a. Online/ offline learning b. Class discussion c. Take notes on learning materials  <b>Media:</b> a. Slides/ ppt b. Zoom meeting/ LCD c. Text book	<b>Subject Matter:</b> Feeding management	Assignment 2: 2 (CLO...) This sub-CLO will assess during UA (20% (CLO... & CLO... 112
12	<b>Sub-CLO 9:</b>  After taking this course, students will be able to explain Nutrient	a. Accuracy in nutrient metabolism in dairy farms	<b>Criterion:</b> Using the presentation and paper assessment rubric	KM+PT (2 weeks x 3 credits x 120 minutes)  <b>Learning Methods:</b> <i>Self-Paced Learning</i>	TM (2 weeks x 2 credits x 50 minutes)  <b>Learning Methods:</b> a. Lecture	<b>Subject Matter:</b> Nutrient metabolism in dairy farms	This sub-CLO will assess during

	Metabolism, health and nutrition in Dairy Cows		<p><b>Technique:</b> <i>Non-test:</i></p>	<p><b>Activities:</b></p> <ol style="list-style-type: none"> <li>Recording attendance</li> <li>Completing assignment</li> <li>Practicum</li> </ol> <p><b>Moda (Learning Management System):</b> kelas.usu.ac.id</p>	<p>b. Discussion</p> <p><b>Activities:</b></p> <ol style="list-style-type: none"> <li>Online/ offline learning</li> <li>Class discussion</li> <li>Take notes on learning materials</li> </ol> <p><b>Media:</b></p> <ol style="list-style-type: none"> <li>Slides/ ppt</li> <li>Zoom meeting/ LCD</li> <li>Text book</li> </ol>		<p>UA (209 (CLOC CMPK 1 &amp; C 112</p>
13-14	<p>Sub-CLO 10: After taking this course, students will be able to explain Nutrition in the Lactation Phase</p>	<p>Accuracy in explaining nutritional needs in each lactation period in dairy cattle</p>	<p><b>Criterion:</b> Using the assessment rubric</p> <p><b>Technique:</b> <i>Non-test: Problem based learning</i></p>	<p>KM+PT (2 weeks x 3 credits x 120 minutes)</p> <p><b>Learning Methods:</b> <i>Self-Paced Learning</i></p> <p><b>Activities:</b></p> <ol style="list-style-type: none"> <li>Recording attendance</li> <li>Completing assignment</li> <li>Practicum</li> </ol> <p><b>Problem-Based Learning 3:</b></p> <ol style="list-style-type: none"> <li>Divide the group evenly (the lecturer divides)</li> <li>Creating a paper on genital munitality, problems due to</li> </ol>	<p>TM (1 week x 2 credits x 50 minutes)</p> <p><b>Learning Methods:</b></p> <ol style="list-style-type: none"> <li>Lecture</li> <li>Discussion</li> </ol> <p><b>Activities:</b></p> <ol style="list-style-type: none"> <li>Online/ offline learning</li> <li>Class discussion</li> <li>Take notes on learning materials</li> </ol> <p><b>Media:</b></p> <ol style="list-style-type: none"> <li>Slides/ ppt</li> <li>Zoom meeting/ LCD</li> <li>Text book</li> </ol>	<p><b>Subject Matter:</b></p> <ol style="list-style-type: none"> <li>lactation period</li> <li>Dry Time Livestock</li> <li>Pregnant Cattle</li> </ol>	<p>This sub-C will asses duri UA (209 (CLOC CMPK 1 &amp; C 112</p>

				<p>genital munitality, and prevention in the next offspring, a maximum of 15 pages from the table of contents to the TNR font bibliography size 12 spaces 1.5 sent in pdf form</p> <p>c. Presentation</p> <p><b>Moda (Learning Management System):</b> kelas.usu.ac.id</p>			
15	<p>Sub-CLO 11:</p> <p>After taking this course, students will be able to explain Trends and Innovations in Dairy Nutrition</p>	<p>a. Accuracy in explaining innovations in dairy nutrition needs</p>	<p><b>Criterion:</b> Using the assessment rubric</p> <p><b>Technique:</b> <i>Test: Case Method</i></p>	<p>KM+PT (2 weeks x 3 credits x 120 minutes)</p> <p><b>Learning Methods:</b> <i>Self-Paced Learning</i></p> <p><b>Activities:</b></p> <ol style="list-style-type: none"> <li><i>Recording attendance</i></li> <li><i>Completing assignment</i></li> <li><i>Practicum</i></li> </ol> <p><b>Moda (Learning Management System):</b> kelas.usu.ac.id</p>	<p>TM (1 week x 2 credits x 50 minutes)</p> <p><b>Learning Methods:</b></p> <ol style="list-style-type: none"> <li>Lecture</li> <li>Discussion</li> </ol> <p><b>Activities:</b></p> <ol style="list-style-type: none"> <li>Online/ offline learning</li> <li>Class discussion</li> <li>Take notes on learning materials</li> </ol> <p><b>Media:</b></p> <ol style="list-style-type: none"> <li>Slides/ ppt</li> <li>Zoom meeting/ LCD</li> </ol>	<p><b>Subject Matter:</b> Innovation of livestock nutritional needs</p>	<p>This sub-C will asses duri UA (15% (CLO &amp; CLO1</p>

				c. Text book	
16	FINAL SEMESTER EXAMINATION				159



**Assessment Design:**

CLO Code and Percentage	Sub-CLO Code	Form of Evaluation	Percentage (%)	Total	Implementation of Evaluation
CLO0324 (27.58%)	Sub-CLO2	Quiz	2.5	27.58%	Week 3
	Sub-CLO3	Assignment	2.5		Week 4
	Sub-CLO4	PBL	10		Week 6
	Sub-CLO5	UTS	3.75		Week 8
	Sub-CLO6	Quiz	3.5		Week 9
	Sub-CLO9	UAS	5		Week 16
	Sub-CLO8	Assignment	2.5		Week 12

	Sub-CLO9	UAS	3.5		Week 13
	Sub-CLO10	UAS	10		Week 14
CLO0621 (24.14%)	Sub-CLO2	UTS	3.75	24.14%	Week 8
	Sub-CLO4	PBL	10		Week 6
	Sub-CLO5	UTS	3.75		Week 8
	Sub-CLO6	Quiz	3.34		Week 9
	Sub-CLO8	Assignment	3.34		Week 12
	Sub-CLO9	PBL	10		Week 13
	Sub-CLO10	UAS	5		Week 16
CLO0911 (27.58%)	Sub-CLO3	PBL	10	27.58%	Week 8
	Sub-CLO4	CM	20		Week 9
	Sub-CLO5	PBL	10		Week 12
	Sub-CLO7	UAS	5		Week 13
CLO1125 (20.69%)	Sub-CLO3	PBL	10	20.69%	Week 5
	Sub-CLO4	CM	20		Week 6
	Sub-CLO6	UTS	5		Week 7
	Sub-CLO7	UAS	3		Week 8
	Sub-CLO8	UAS	3		Week 9
	Sub-CLO9	UAS	3		Week 9

	Sub-CLO10	UAS	5		Week 10
<b>Total</b>			100%	100%	

**Assessment Plan:**

Form of Evaluation	Sub-CLO	Assessment Instrument [Frequency]		Bills (proof)	Assessment Weight (%)
		Formative	Summative		
<b>Quiz/Q&amp;A</b>	Sub-CLO2 and Sub-CLO6	Assessment rubric [2 times]	-	Quiz answers uploaded to kelas.usu.ac.id	5
<b>Assignment</b>	Sub-CLO3 and Sub-CLO8	Assessment rubric [2 times]	-	Tasks uploaded to kelas.usu.ac.id	5
<b>Problem based Learning</b>	Sub-CLO4 and Sub-CLO9	-	Assessment rubric [3 times]	Logbooks/worksheets/slides uploaded to kelas.usu.ac.id	30
<b>Case Method</b>	Sub-CLO4	-	-	-	20
<b>Written Exam 1 (UTS)</b>	Sub-CLO1 and Sub-CLO5	-	Assessment rubric [1 time]	Written exam result sheet	20
<b>Written exam 2 (UAS)</b>	Sub-CLO7 and Sub-CLO11	-	Assessment rubric [1 time]	Written exam result sheet	20
<b>Total</b>					<b>100%</b>

The logo of Universitas Jember is a circular emblem. It features a central yellow five-pointed star above a yellow sun-like shape. The sun is surrounded by green leaves and a white flower on the left. The text 'UNIVERSITAS JEMBER' is written in a circular path around the central elements. Below the sun, the word 'KATERA' is visible, and 'UTARA' is at the bottom. The entire logo is rendered in a light, semi-transparent grey color.

**Explanation:**

**a. Quiz 5%**

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

**b. Assignment 5%**

During the semester there will be 2 structured assignments. The assignments given are an effort to add insight by making a resume related to the material written in the SSP.

**c. Case Method 20%**

During the semester there will be a case method, each student will make a paper and report on each case method in groups. Case method in this course is done twice. 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. Project based learning (PBL) 30%**

During the semester there will be PBL, each student will make a paper and report from each PBL in groups. PBL in this course is conducted 3 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 make presentations.

**e. UTS (Midterm Exam) 20%**

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

**f. UAS (Final Exam) 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 answer, and essay questions.

**ASSESSMENT SCORE**

**Quiz Assessment Rubric :**

The quiz consists of 5 essay questions done on a piece of paper (done 2 times for 1 semester)

<b>Grades per item of the question</b>	<b>Criterion</b>
16-20	Be able to answer questions correctly, the steps to work on the questions correctly, and be completely correct
11-15	Steps to work on the correct questions, there are few mistakes
6-10	Most of the steps to work on the questions are correct, there are many mistakes
0-5	The steps to work on the questions are not precise, unable to solve the questions

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

**Rubric Assessment of Teaching Journals/ Proposals/ Reports/ Papers:**

<b>Assessment Criteria</b>	<b>4 Excellent</b>	<b>3 Good</b>	<b>2 Enough</b>	<b>1 Less</b>
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<b>Understanding Learning Topics with Resumed Journals</b>	Understand the topic exactly (25)	Understand the topic (20)	Not understanding the topic fully and precisely (15)	Not understanding the topic (10)
<b>Fill</b>	Draft shows understanding in-depth to the material discussed and participants integrate the information that has been learned and/or assigned to be read during the lecture properly and appropriately (25)	The draft shows an understanding of the material discussed and integrates some of the information that has been learned and/or assigned to be read during the lecture. (20)	The draft shows an understanding of the material being discussed and only integrates A small portion of the information that has been learned and/or assigned to be read during lectures. (15)	The draft shows a lack of understanding of the material discussed so that it is not clear and does not integrate information that has been learned and/or assigned to be read during lectures. (10)
<b>Clarity of Writing</b>	All the ideas of the writing are conveyed well and clearly. (25)	Most of the ideas of writing are conveyed well and clearly. (20)	Some of the ideas of the writing are conveyed well and clearly. (15)	The idea of writing is not conveyed properly and clearly. (10)
<b>Language Clarity</b>	Use foreign / Indonesian language well and correctly, few grammatical errors and word choices that do not interfere with understanding (25)	Use foreign / Indonesian languages well and correctly with few grammatical errors and word choices that interfere with understanding. (20)	Using a foreign language / Indonesian quite well and correctly with some grammatical errors and word choices (15)	Not using foreign/Indonesian languages properly and correctly because the writing contains many grammatical errors and word choices (10)
<b>Total</b>	<b>81-100 (Very Good)</b>	<b>61-80 (Good enough)</b>	<b>41-60 (Enough)</b>	<b>0-40 (Less)</b>

**Group Presentation Assignment Assessment Rubric:**

<b>CATEGORY</b>	<b>4 Excellent</b>	<b>3 Good</b>	<b>2 Enough</b>	<b>1 Less</b>
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<p><b>Group Preparation</b></p>	<p>The group fully prepared themselves and carried out optimal presentation exercises.</p> <p>Fill each other in with clear tasks for each group member. (25)</p>	<p>The group seems quite prepared but may need more presentation practice.</p> <p>The responsibilities of each member of the group need to be identified. (20)</p>	<p>The group made an effort to prepare themselves but did not do the presentation preparation exercises.</p> <p>Duties and responsibilities are determined and accepted without careful consideration. (15)</p>	<p>The group did not seem to make any preparations at all for the presentation.</p> <p>Duties and responsibilities are assigned and accepted at random. (10)</p>
<p><b>Presentation Organization</b></p>	<p>Groups present content clearly, logically, and systematically, through introductions, main points, and cohesive conclusions.</p> <p>The group uses visual aids that effectively support and strengthen the presentation. (25)</p>	<p>The group presents the content logically and systematically, through an introduction, main points and conclusions.</p> <p>The group used visual aids that showed a connection to the content of the presentation. (20)</p>	<p>The group presents the content quite logically and systematically, but does not contain an introduction, main points, or conclusions.</p> <p>The group occasionally uses visual aids that do not support the content of the presentation. (15)</p>	<p>The group presented the content randomly without any introduction, main points, or conclusions.</p> <p>The group used visual aids that did not support or did not have any visual aids at all. (10)</p>
<p><b>Task Achievement</b></p>	<p>Each member of the group was able to demonstrate solid knowledge through their own exposure and elaboration, and delivered the part of the presentation that was their task according to the time allocation. (25)</p>	<p>Each member of the group demonstrated good knowledge through their own exposure and elaboration but in a shorter time than the time allotted to him. (20)</p>	<p>Each member of the group demonstrated sufficient knowledge but failed to elaborate, and presented his or her portion in only half of the time allotted to him. (15)</p>	<p>Each member of the group had no knowledge of the content and presented their respective sections less than half of the time allotted to them. (10)</p>

<b>Mastery of Presentation Content</b>	Each member of the group demonstrated a full understanding of the topic of the presentation.  The main points of thought presented are supported by evidence and critically evaluated. (25)	Each group member showed a good understanding of the topic of the presentation.  Most of the main points are illustrated with relevant evidence. (20)	Each member of the group showed a good understanding of several aspects of the topic.  Some illustrations are provided, but not critically evaluated. (15)	Each member of the group did not seem to understand the topic of the presentation very well.  Some evidence was mentioned, but not integrated in the presentation or evaluated. (10)
<b>Answers to Questions</b>	The group was able to accurately answer almost all of the questions the audience asked about the topic of their presentation. (25)	Groups were able to answer precisely most of the questions the audience asked about the topics of their presentations. (20)	The group was able to answer precisely some of the questions that the audience asked about the topic of their presentation. (15)	The group was unable to answer the questions the audience asked about the topic of their presentation appropriately. (10)
<b>Quality of Communication</b>	Group interaction with the audience shows interest and respect for the opinions of others. The response provided supports effective communication. (25)	Group interaction with the audience shows interest and respect for the opinions of others. Responses generally support effective communication. (20)	Some parts of the interaction in the discussion show interest and respect for the opinions of others. (15)	Interaction in discussions shows disrespect for other people's opinions. Response does not support effective communication. (10)
<b>Total</b>	<b>81-100 (Very Good)</b>	<b>61-80 (Good enough)</b>	<b>41-60 (Enough)</b>	<b>0-40 (Less)</b>

Source: Halimi, Sicily. "Assessment Rubric: Constitutional Court Lesson Plan Book Introduction to Teaching Methods", 2021

Maximum value: 25 x 6 components = 150 points: 1.5 = 100

**Essay Writing Exam Assessment Rubric:**

<b>Assessment Criteria</b>	<b>4 Excellent</b>	<b>3 Good</b>	<b>2 Enough</b>	<b>1 Less</b>
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<b>Understanding Questions</b>	Understand the question exactly (25)	Understanding questions (20)	Not understanding the question fully and accurately (15)	Don't understand the question (10)
<b>Fill</b>	Answers show understanding in-depth to the material asked and participants integrate the information that has been learned and/or assigned to be read during the lecture properly and appropriately (25)	Answers show an understanding of the material asked and integrate some of the information that has been learned 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 the information that has been learned and/or assigned to be read during lectures. (15)	The answer shows an incomprehension of the material asked so that it is not clear and does not integrate information that has been learned and/or assigned to be read during lectures. (10)
<b>Clarity of Writing</b>	All the ideas of the writing are conveyed well and clearly. (25)	Most of the ideas of writing are conveyed well and clearly. (20)	Some of the ideas of the writing are conveyed well and clearly. (15)	The idea of writing is not conveyed properly and clearly. (10)
<b>Language Clarity</b>	Use foreign / Indonesian language well and correctly, few grammatical errors and word choices that do not interfere with understanding (25)	Use foreign / Indonesian languages well and correctly with few grammatical errors and word choices that interfere with understanding. (20)	Using a foreign language / Indonesian quite well and correctly with some grammatical errors and word choices (15)	Not using foreign/Indonesian languages properly and correctly because the writing contains many grammatical errors and word choices (10)
<b>Total</b>	<b>81-100 (Very Good)</b>	<b>61-80 (Good enough)</b>	<b>41-60 (Enough)</b>	<b>0-40 (Less)</b>

**Multiple Choice Exam Assessment Rubric:**

<b>Grades per item of the question</b>	<b>Criterion</b>
100/ many questions	Be able to answer questions correctly
0	The answer is not correct/not in accordance with the available answer key

