



**UNIVERSITY OF NORTH SUMATRA (USU)
FACULTY OF AGRICULTURE
ANIMAL SCIENCE STUDY PROGRAM**

Document Code
(to be followed)

SEMESTER LEARNING PLAN (RPS)

COURSE (MK)	CODE	MK family	WEIGHT (credits)	SEMESTER	Date of Preparation
Industry Management of Beef and Labor Cattle	PTN4104	Exact	3	VI	January 29, 20
AUTHORIZATION/ATTESTATION	RPS Developer Lecturer		Approved Head of Study Program		Knowing Chairman of LINKUP USU
	Prof. Dr. Ir. Yunilas, MP Ir. Achmad Sadeli, S.Pt., M.Sc., IPM., ASEAN.Eng Yusni Khairani Tampubolon, M.Sc		Dr. Ir. Ma'ruf Tafsin, M.Si., IPM.		Prof. Dr. Dwi Suryanto M.Sc.
Learning Outcomes	LO-Study Program Charged to Course				
	LO02	Able to apply the concepts of leadership and teamwork, communication, self-motivation and innovation in completing work in the field of animal science.			
	LO03	Able to identify, formulate, and find solutions to problems related to the field of animal science			
	LO06	Supervise and evaluate the completion of assigned work and be able to manage learning independently throughout life			
	LO08	Able to manage integrated and sustainable livestock cultivation based on integration with other agroecosystems and the applications in processing livestock products and waste			
	LO09	Able to manage and implement aspects of efficient feed supply and technology			
	LO10	Able to plan, evaluate and manage livestock businesses with agribusiness principles			
	LO11	Able to develop and understand and apply a variety of best techniques and methods that combine theory and practice relevant to animal science expertise.			
	LO12	Have coherent and up-to-date knowledge in the field of animal science and in accordance with applicable legal regulations can apply animal welfare aspects.			
	Course Learning Outcomes (CLO)				CLO Weight
CLO0217: Able to explain the latest innovations related to technology applications in the management of the slaughter and working livestock industry				24.92%	
CLO0342: Able to explain the layout, input and output processes, and processing in the management of the beef and working cattle industry.				4.73%	

	CLO0636: Able to explain the evaluation related to the application of technology in the beef cattle industry and work on livestock productivity.	4.73%							
	CLO0824: Able to apply technology in the management of the slaughter and working livestock industry based on integrated agricultural integration	10.5%							
	CLO0917: Able to apply the best technology in processing feed for slaughter and working livestock	15.23%							
	CLO1015: Able to make business designs related to the slaughter and working livestock industry with agribusiness principles.	11.33%							
	CLO1137: Able to analyze various techniques and best methods in process technology in the slaughter and working livestock industry.	23.56%							
	CLO1225: Able to explain the regulations that support the use of technology in the field of slaughter and working cattle industry	5%							
End Capability of Each Learning Stage (Sub-CLO)									
Sub-CLO1	After attending this lecture, students will be able to explain an overview of beef cattle industry management and work.								
Sub-CLO2	After attending this lecture, students will be able to explain the application of technology and evaluation in the management of beef and working cattle.								
Sub-CLO3	After attending this lecture, students will be able to explain the application of technology and evaluation in the processing of feed and work animal feed.								
Sub-CLO4	After attending this lecture, students will be able to explain the application of technology and evaluation in the marketing of slaughter and working livestock.								
Sub-CLO5	After attending this lecture, students will be able to explain the application of integrated agricultural integration technology and evaluation in the beef and working cattle industry.								
Sub-CLO6	After attending this lecture, students will be able to explain the prospects of the beef cattle industry and work.								
Sub-CLO7	After attending this lecture, students will be able to explain the regulations that can support the use of technology in the beef and working cattle industry.								
Sub-CLO8	After attending this lecture, students will be able to explain the role of the livestock sector in sustainable development.								
Sub-CLO9	After attending this lecture, students will be able to analyze suitable slaughter and working livestock commodities and sustainable slaughter and working livestock industry in a region using agribusiness principles.								
Correlation of CLO with Sub-CLO									
	CMPK0217	√	√	√	√	√	√	√	√

	CLO0342		√	√	√	√					
	CLO0636		√	√	√	√					
	CLO0824								√	√	
	CLO0917		√	√	√	√			√	√	
	CLO1015						√				√
	CLO1137		√	√	√	√	√	√	√	√	
	CLO1225							√			
Brief Course Description	After completing the course, students are expected to become graduates who are able to develop their own business (become entrepreneurs) independently by thinking logically, critically and systematically in applying and developing the knowledge they have gained about the livestock industry. This course is conducted with the language of instruction, namely Indonesian, and face-to-face meetings are conducted several times consisting of structured assignments, <i>case methods</i> , and practicum both offline and online.										
Study Material: Learning Materials	BK03 Animal Production Science BK07 Application and Development of Animal Science and Technology 1. Scope of introduction to beef and working livestock science and industry 2. Application of technology in maintenance management 3. Application of technology in feed processing 4. Application of technology in marketing 5. Application of technology based on integrated farming 6. Prospects for beef and working livestock farming 7. Regulation of technology use in the beef and working cattle industry 8. Sustainable livestock development strategy 9. Commodity selection of the slaughter and working livestock industry										
References	Main: 1. Hafid, H., Junaedi, C. Hetharia, A. Makmur, dan Ramaiyulis et al. 2023. Ternak Potong (Teori dan Praktik). Bandung: Widina Utama 2. Daryanto, A. 2017. Daya Saing dan Rantai Nilai Inklusif Industri Peternakan. Bogor: IPB Press										

	<ol style="list-style-type: none"> 3. Cottle D. and L. Khan. 2014. Beef Cattle Production and Trade. Victoria: CSIRO Publishing 4. Kuswati dan T. Susilawati. 2016. Industri Sapi Potong. Malang: UB Press 5. Skelley, W. C. 2015. Beef Cattle Management – with Information on Selection, Care, Breeding and Fattening of Beef Cows and Bulls. Cooper Press 6. Mana, R. V. 2016. Integrated Farming System: A Strategy for Sustainable Farm Production & Livelihood Security. Wilmington: S Academic 7. Lorenzo, J. M., P. E. S. Munekata, F. J. Barba, and F. Toldrá. 2019. More than Beef, Pork and Chicken – The Production, Processing Quality Traits of Other Sources of Meat for Human Diet. United States: Springer Publishing. 8. Susilo, A., D. Rosyidi, F. Jaya, dan M. W. Apriliyani. 2019. Dasar Teknologi Hasil Ternak. Malang: UB Press 9. Chiba, L. I. 2022. Sustainable Swine Nutrition 2nd ed. Hoboken: Wiley-Blackwell 10. Fradson, R. D., W. L. Wilke, and A. D. Fails. 2009. Anatomy and Physiology of Farm Animals 7th ed. Hokoben: Wiley-Blackwell 11. Ardana, I. B. dan H. Putra. 2022. Ternak Babi: Manajemen Reproduksi, Produksi dan Penyakit. Bali: Udayana University Press 12. McNitt, J. I., S. D. Lukefahr, P. R. Cheeke, N. M. Patton. 2022. Rabbit production 9th ed. Wallingford: CABI Publishing 13. Banday, M. T., H. P. Shrivastava, and an H. Hamadani. 2014. Rabbit Production and Management. Delhi: New India Publishing Agency
	<p>Additional:</p> <ol style="list-style-type: none"> 1. Thohari, I., Mustakim, M. C. Padaga, P. P. Rahayu. 2017. Teknologi Hasil Ternak. Malang: UB Press 2. Kilgour, R. 2020. Livestock Behavior: A Practical Guide 1st ed. Boca Raton: CRC Press 3. Cheeke, P. R. 1987. Rabbit Feeding and Nutrition. Cambridge: Academic Press 4. Guntoro, S. 2008. Membuat Pakan Ternak dari Limbah Perkebunan. Jakarta: Agro Media Pustaka 5. Hendayana, R., L. Hutahaean, Rubiyo,B. dan Bakrie. 2018. Model Inovasi Pertanian Bioindustri: Optimalisasi Kinerja Kegiatan M Pengembangan Inovasi Teknologi Pertanian Bioindustri. Bogor: Globa Media Publikasi. 6. Pazia, R., Antonius, dan L. S. Sucitra. 2022. Potensi Limbah Pertanian dan Perkebunan Sebagai Pakan Ternak Ruminansia. Jawa Ter Sketsa Media. 7. Lichfouse, E., M. Navarrete, P. Debaeke, V. Souchere, and C. Alberola. 2009. Sustainable Agriculture. New York: Spinger Publishing 8. Jones, S. M. 1995. Quality and Grading of Carcasses of Meat Animals 1st ed. Boca Raton: CRC Press 9. Wu, G. 2022. Recent Advances in Animal Nutrition and Metabolism. Berlin: Springer Publishin 10. Febrina, D., R. Pazla, dan N. I. Sari. 2023. Fisiologi Pencernaan Ruminansia: Indramayu: Adanu Abimata 11. Tim Karya Tani Mandiri. 2009. Pedoman Budidaya Berternak Kelinci. Bandung: Nuansa Aulia 12. Government regulation on green industry 13. Government regulations on animal welfare 14. Government regulation on the use of appropriate technology in the slaughter and working livestock industry 15. National and international journals 16. Practicum guide
Lecturers	<ol style="list-style-type: none"> 1. Prof. Dr. Ir. Yunilas, MP 2. Ir. Achmad Sadeli, S.Pt., M.Sc., IPM., ASEAN.Eng

		3. Yusni Khairani Tampubolon, M.Sc 4. Practitioner					
Conditional Subjects	Students are expected to have completed the following courses a. Cut and Work Production Science						
(1)	End ability of each learning stage (Sub-CLO) (2)	Assessment		Form of Learning; Learning Methods; Student Assignment; [Estimated Time]		Study Material (Learning Material) (7)	Assessment Weight (%) (8)
		Indicator (3)	Criteria and Techniques (4)	Asynchronous (5)	Synchronous (6)		
1	Sub-CLO1: After attending this lecture, students will be able to explain an overview of beef cattle industry management and work.	Accuracy in explaining the scope of the science and industry of slaughter and working livestock	Criteria: Using essay and multiple choice assessment rubrics Techniques: <i>Test</i>	Asynchronous (5) KM+PT (1 week x 3 credits x 120 minutes) Learning Methods: <i>Self-Paced Learning</i> Activities: a. Attendance b. Download and read the Syllabus (RPS), Learning Implementation Plan (SAP), Course Agreement, and Learning Materials Moda (Learning Management System): class.usu.ac.id	Synchronous (6) TM (1 week x 2 credits x 50 minutes) Learning Methods: a. Lecture b. Discussion Activities: a. Online/offline learning b. Class discussion c. Take notes on learning materials Media: a. Slides/ ppt b. Zoom meeting / LCD c. Text book	Subject matter: a. Course Contract b. Scope of introduction to beef and working livestock science and industry	This CLO be assessed during UTS (2 (CLO))
2	Sub-CLO 2: After attending this lecture, students will be able to explain the application of	a. Accuracy in explaining the technology of raising beef and working livestock	Criteria: Using essay and multiple choice assessment rubrics Techniques:	Asynchronous (5) KM+PT (1 week x 3 credits x 120 minutes) Learning Methods: <i>Self-Paced Learning</i>	Synchronous (6) TM (1 week x 2 credits x 50 minutes) Learning Methods: a. Lecture b. Discussion	Subject matter: a. Benefits of technology implementation b. Introduction of technology	This CLO be assessed during UTS (2 (CLO))

	technology and evaluation in the management of beef and working cattle.	<ul style="list-style-type: none"> b. Accuracy in explaining the impact of technology application c. accuracy in explaining the <i>assessment of slaughter and working cattle industry management</i> 	<i>Test</i>	<p>Activities:</p> <ul style="list-style-type: none"> a. Attendance <p>Moda (Learning Management System): class.usu.ac.id</p>	<p>Activities:</p> <ul style="list-style-type: none"> a. Online/offline learning b. Class discussion c. Take notes on learning materials <p>Media:</p> <ul style="list-style-type: none"> a. Slides/ ppt b. Zoom meeting / LCD c. Text book 	<ul style="list-style-type: none"> related to beef and working cattle management c. Impact of technology implementation d. Evaluation of beef and working cattle industry management
3	<p>Sub-CLO 3:</p> <p>After attending this lecture, students will be able to explain the application of technology and evaluation in the processing of beef and work animal feed.</p>	<ul style="list-style-type: none"> a. Accuracy in explaining feed processing technology for slaughter and work animals b. Accuracy in explaining the impact of technology application c. accuracy in explaining the <i>assessment of slaughter and working cattle industry management</i> 	<p>Criteria: Using essay and multiple choice assessment rubrics</p> <p>Techniques: <i>Test</i></p>	<p>KM+PT (1 week x 3 credits x 120 minutes)</p> <p>Learning Methods: <i>Self-Paced Learning</i></p> <p>Activities:</p> <ul style="list-style-type: none"> a. Attendance <p>Moda (Learning Management System): class.usu.ac.id</p>	<p>TM (1 week x 2 credits x 50 minutes)</p> <p>Learning Methods:</p> <ul style="list-style-type: none"> a. Lecture b. Discussion <p>Activities:</p> <ul style="list-style-type: none"> a. Online/offline learning b. Class discussion c. Take notes on learning materials <p>Media:</p> <ul style="list-style-type: none"> a. Slides/ ppt b. Zoom meeting / LCD c. Text book 	<p>Subject matter:</p> <ul style="list-style-type: none"> a. Benefits of technology implementation b. Introduction to effective and efficient feed processing technology in supporting livestock productivity c. Impact of technology implementation d. Evaluation of beef and working cattle industry management
4	Sub-CLO 4:	<ul style="list-style-type: none"> a. Accuracy in explaining feed processing 	<p>Criteria:</p>	<p>KM+PT (1 week x 3 credits x 120 minutes)</p>	<p>TM (1 week x 2 credits x 50 minutes)</p>	<p>Subject matter:</p>

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	<p>After attending this lecture, students will be able to explain the application of technology and evaluation in the marketing of slaughter and working livestock.</p>	<p>technology for slaughter and work animals</p> <p>b. Accuracy in explaining the impact of technology application</p> <p>c. accuracy in explaining the <i>assessment of slaughter and working cattle industry management</i></p>	<p>Using essay and multiple choice assessment rubrics</p> <p>Techniques: <i>Test:</i> <i>Quiz</i></p>	<p>Learning Methods: <i>Self-Paced Learning</i></p> <p>Activities: a. Attendance b. Completing quiz</p> <p>Quiz 1: <i>Quizzes to measure students' understanding of the application of technology in the beef and working cattle industry</i></p> <p>Moda (Learning Management System): class.usu.ac.id</p>	<p>Learning Methods: a. Lecture b. Discussion</p> <p>Activities: a. Online/offline learning b. Class discussion c. Take notes on learning materials</p> <p>Media: a. Slides/ ppt b. Zoom meeting / LCD c. Text book</p>	<p>a. Benefits of technology implementation</p> <p>b. Introduction of technologies related to marketing of slaughter and working livestock</p> <p>c. Impact of technology implementation</p> <p>d. Evaluation of beef and working cattle industry management</p>
5	<p>Sub-CLO 5:</p> <p>After attending this lecture, students will be able to explain the application of integrated agricultural integration technology and evaluation in the beef and working cattle industry.</p>	<p>a. Accuracy in explaining the definition of integrated agricultural integration</p> <p>b. Accuracy in explaining the selection of technology in realizing integrated agriculture</p> <p>c. Accuracy in explaining the</p>	<p>Criteria: Using essay and multiple choice assessment rubrics</p> <p>Techniques: <i>Test</i></p>	<p>KM+PT (1 week x 3 credits x 120 minutes)</p> <p>Learning Methods: <i>Self-Paced Learning</i></p> <p>Activities: a. Attendance b. Completing quiz</p>	<p>TM (1 week x 2 credits x 50 minutes)</p> <p>Learning Methods: a. Lecture b. Discussion</p> <p>Activities: a. Online/offline learning b. Class discussion c. Take notes on learning materials</p>	<p>Subject matter: a. Definition of integrated farming integration b. Utilization of related technologies to realize integrated agricultural integration in the beef and</p>

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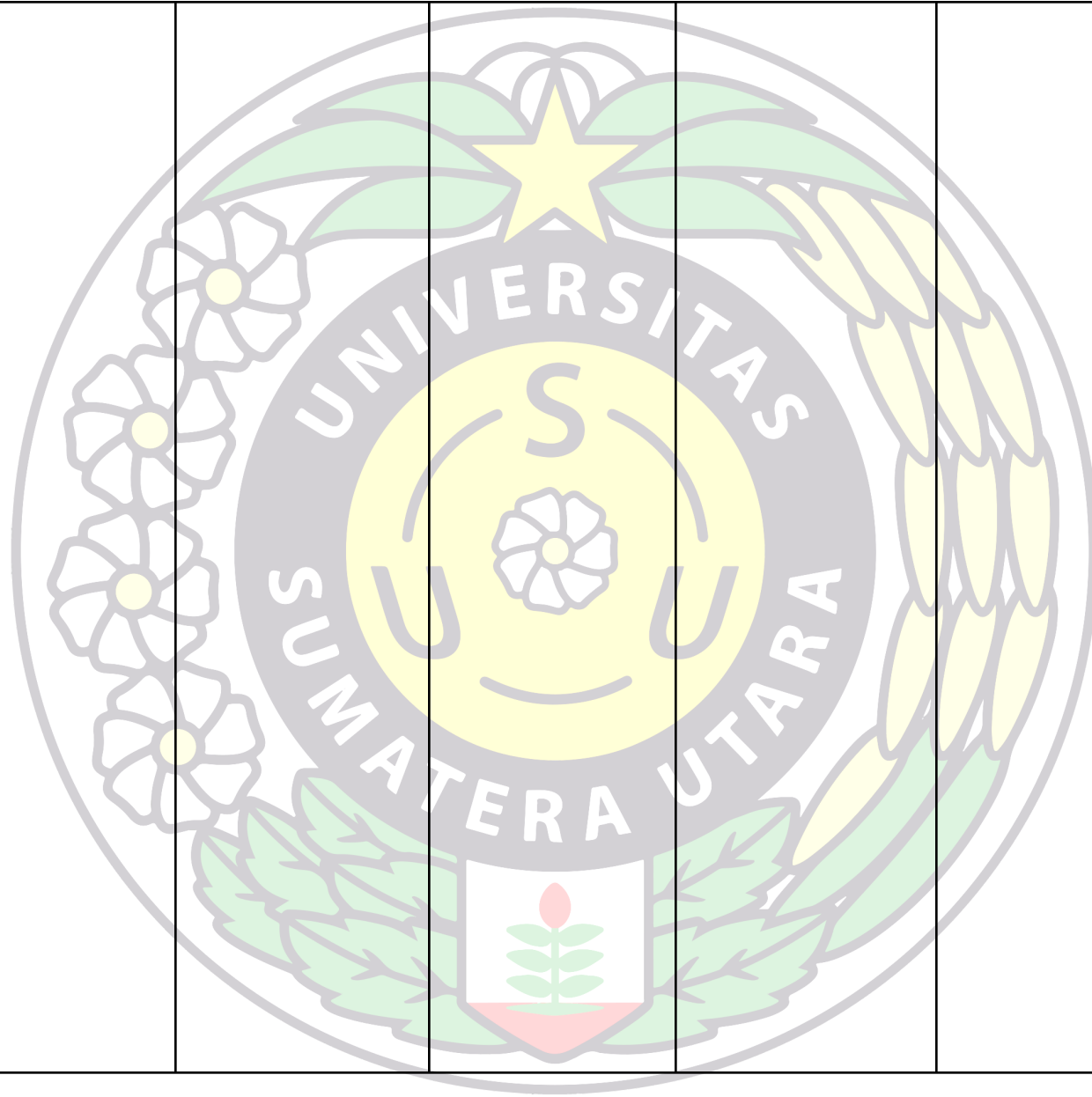
		<p>impact of technology application</p> <p>d. accuracy in explaining the <i>assessment of slaughter and working cattle industry management</i></p>		<p>Moda (Learning Management System): class.usu.ac.id</p>	<p>Media:</p> <p>a. Slides/ ppt b. Zoom meeting / LCD c. Text book</p>	<p>working cattle industry</p> <p>c. Impact of technology implementation</p> <p>d. Evaluation of beef and working cattle industry management</p>
6-7	<p>Sub-CLO 6:</p> <p>After attending this lecture, students will be able to explain the prospects of the beef cattle industry and work.</p>	<p>a. Accuracy in explaining the definition of market demand and product supply</p> <p>b. Accuracy in explaining the facilities and infrastructure in supporting beef and working cattle businesses.</p> <p>c. Accuracy in explaining the cost analysis of beef and work cattle business</p> <p>d. Accuracy in explaining the differences in labor and appropriate methods in the slaughter and working livestock industry.</p>	<p>Criteria: Using the paper grading rubric</p> <p>Techniques: <i>Non-test: Problem-based learning</i></p>	<p>KM+PT (2 weeks x 3 credits x 120 minutes)</p> <p>Learning Methods: <i>Self-Paced Learning</i></p> <p>Activities:</p> <p>a. <i>Recording attendance</i></p> <p>b. <i>Completing quizzes and assignments</i></p> <p>c. <i>Field visit</i></p> <p>Problem based learning:</p> <p>a. <u>Divide the group evenly (lecturer divides)</u></p> <p>b. <u>Prepare a <i>field visit report</i> from the farms visited by each group (A4; TNR 12 pt; max 5 pages</u></p>	<p>TM (2 weeks x 2 credits x 50 minutes)</p> <p>Learning Methods:</p> <p>a. Lecture b. Discussion</p> <p>Activities:</p> <p>a. Online/offline learning b. Class discussion c. Take notes on learning materials</p> <p>Media:</p> <p>a. Slides/ ppt b. Zoom meeting / LCD c. Text book</p>	<p>Subject matter:</p> <p>a. Market demand</p> <p>b. Livestock product offering</p> <p>c. Facilities and infrastructure supporting livestock businesses</p> <p>d. Cost analysis of beef and working cattle enterprises</p> <p>e. Mechanical and non-mechanical labor</p> <p>f. Appropriate techniques/methods in the beef and working</p>

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				containing the results of interviews and documentation)		livestock industry	
				Moda (Learning Management System): class.usu.ac.id			
8	MID SEMESTER EXAMINATION (UTS)						20%
9	Sub-CLO 7: After attending this lecture, students will be able to explain the regulations that can support the use of technology in the beef and working cattle industry.	Accuracy in explaining the regulations supporting the use of technology and the application of animal welfare.	Criteria: Using essay and multiple choice assessment rubrics Techniques: <i>Test</i>	KM+PT (1 week x 3 credits x 120 minutes) Learning Methods: <i>Self-Paced Learning</i> Activities: a. Attendance Moda (Learning Management System): class.usu.ac.id	TM (1 week x 2 credits x 50 minutes) Learning Methods: a. Lecture b. Discussion Activities: a. Online/offline learning b. Class discussion c. Take notes on learning materials Media: a. Slides/ ppt b. Zoom meeting / LCD c. Text book	Subject matter: a. Regulations supporting the use of technology b. <i>Animal welfare</i>	This CLO be assessed during UA (20%) (CLO01, CLO02, CLO03, CLO04 & CLO05)
10-11	Sub-CLO 8: After attending this lecture, students will be able to explain the role of the livestock	a. Accuracy in explaining the definition of livestock development and the role of the	Criteria: Using essay and multiple choice and paper review assessment rubrics	KM+PT (1 week x 3 credits x 120 minutes) Learning Methods: <i>Self-Paced Learning</i>	TM (1 week x 2 credits x 50 minutes) Learning Methods: a. Lecture b. Discussion	Subject matter: a. Definition of sustainable livestock development	This CLO be assessed during UA (20%)

	sector in sustainable development.	<p>livestock sector in national development</p> <p>b. Accuracy in explaining concepts and interests in creating sustainable bioindustry-based businesses</p> <p>c. Accuracy in explaining the definition of green agricultural transformation and green agricultural transformation efforts in supporting national economic transformation.</p> <p>d. Accuracy in explaining sustainable bioindustry-based livestock development strategies</p>	<p>Techniques: <i>Test & non-test</i></p>	<p>Activities:</p> <p>a. Attendance b. Completing assignment</p> <p>Assignment 1: Student will review journal about explain the role of the livestock sector in sustainable development</p> <p>Moda (Learning Management System): class.usu.ac.id</p>	<p>Activities:</p> <p>a. Online/offline learning b. Class discussion c. Take notes on learning materials</p> <p>Media:</p> <p>a. Slides/ ppt b. Zoom meeting / LCD c. Text book</p>	<p>b. The role of the livestock sector in national development</p> <p>c. Concepts and interests in creating sustainable bioindustry-based enterprises</p> <p>d. Definition of green agricultural transformation</p> <p>e. Green agricultural transformation in supporting economic transformation</p> <p>f. Sustainable bio-industrial livestock development strategy</p>	<p>Assignment 1: 5 (CLO01, CLO02, CLO03 & CLO1)</p>
12-15	<p>Sub-CLO 9:</p> <p>After attending this lecture, students will be able to analyze suitable slaughter and working livestock</p>	<p>a. Accuracy in explaining the population distribution and characteristics of cattle, kamabing, and sheep.</p>	<p>Criteria: Assessment Rubric</p> <p>Techniques: <i>Test:</i> <i>Project based learning</i></p>	<p>KM+PT (2 weeks x 3 credits x 120 minutes)</p> <p>Learning Methods: <i>Self-Paced Learning</i></p> <p>Activities:</p>	<p>TM (2 weeks x 2 credits x 50 minutes)</p> <p>Learning Methods:</p> <p>a. Lecture b. Discussion</p>	<p>Subject matter:</p> <p>f. Population distribution of cattle, kamabing and sheep</p>	<p>PBL: (CLO01, CLO02, CLO03 & CLO1)</p>

	<p>commodities for a sustainable slaughter and working livestock industry in a region using agribusiness principles.</p>	<p>b. Accuracy in explaining the population distribution and characteristics of buffaloes, horses and pigs c. Accuracy in explaining the population distribution and characteristics of poultry livestock d. Accuracy in explaining the population distribution and characteristics of rabbits e. Accuracy in explaining environmental adjustments and livestock commodities with business types and business design with agribusiness principles so that it can become a sustainable business.</p>	<p>a. <i>Recording attendance</i> b. <i>Completing assignment</i></p> <p>Project-based Learning: c. Divide the group evenly (the same group as the <i>field visit</i> activity) d. Make a paper on risk analysis and prospects for the slaughter cattle industry in the North Sumatra region (maximum 15 pages from table of contents to bibliography, TNR font 12 pt spacing 1.5 sent in pdf form) e. Group presentation</p> <p>Moda (Learning Management System): class.usu.ac.id</p>	<p>Activities: a. Online/offline learning b. Class discussion c. Take notes on learning materials d. Presentation</p> <p>Media: a. Slides/ ppt b. Zoom meeting / LCD 1. Text book</p>	<p>g. Characteristics of beef and working cattle h. Adjustment of environment and commodity to the type of beef and working livestock enterprise i. Business design with agribusiness principles j. Buffalo, horse and pig population distribution k. Characteristics of beef and working cattle l. Adjustment of environment and commodity to the type of beef and working livestock enterprise m. Business design with agribusiness principles</p>	
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- n. Distribution of poultry population
- o. Characteristics of beef and working cattle
- p. Adjustment of environment and commodity to the type of beef and working livestock enterprise
- q. Business design with agribusiness principles
- r. Rabbit population distribution
- s. Characteristics of beef and working cattle
- t. Adjustment of environment and commodity to the type of beef and working livestock enterprise
- u. Business design with agribusiness principles

16	FINAL SEMESTER EXAMINATION (UAS)					209
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Notes in accordance with SN Dikti Permendikbud No 3/2020:

1. Learning Outcomes of Graduates of Study Program (LO-SP) are the abilities possessed by each graduate of Study Program which are internalization of attitudes, mastery of knowledge and skills according to the level of the study program obtained through the learning process.
2. LOs imposed on courses are some of the learning outcomes of study program graduates (LO-SP) used for the formation / development of a course consisting of aspects of attitude, general skills, specific skills and knowledge.
3. Course LO (CLO) is an ability that is specifically described from the ELOs charged to the course, and is specific to the study material or learning material for the course.
4. Course Sub-CP (Sub-CLO) is an ability that is specifically described from CLO which can be measured or observed and is the final ability planned at each stage of learning, and is specific to the learning material of the course.
5. Indicators of ability assessment in the process and student learning outcomes are specific and measurable statements that identify the ability or performance of student learning outcomes accompanied by evidence.
6. Assessment criteria are benchmarks used as a measure or measure of learning achievement in assessment based on predetermined indicators. Assessment criteria are guidelines for assessors so that the assessment is consistent and unbiased. Criteria can be quantitative or qualitative.
7. Assessment techniques: test and non-test.
8. Forms of learning: Lecture, Reception, Tutorial, Seminar or equivalent, Practicum, Studio Practice, Workshop Practice, Field Practice, Research, Community Service and/or other equivalent forms of learning.
9. Learning Methods: *Small Group Discussion, Role-Play & Simulation, Discovery Learning, Self-Directed Learning, Cooperative Learning, Collaborative Learning, Contextual Learning, Project Based Learning*, and other equivalent methods.
10. Learning Materials are details or descriptions of study materials that can be presented in the form of several topics and sub-topics.
11. The assessment weight is the percentage of assessment of each sub-CLO achievement which is proportional to the difficulty level of the sub-CLO achievement, and totals 100%.
12. **PB= Learning Process**, **PT= Structured Assignment**, **KM= Independent Activity**.

Assessment Design:

CLO Code and Percentage	Sub-CLO Code	Form of Evaluation	Percentage (%)	Total	Evaluation Implementation
CLO0217 (24.92%)	Sub-CLO1	UTS	1.36	24.92	Week 8
	Sub-CLO2	UTS	1.36		Week 8
	Sub-CLO3	UTS	1.37		Week 8
	Sub-CLO4	Quiz	1		Week 4
	Sub-CLO5	UTS	1		Week 8

	Sub-CLO6	Case Method	6.66		Week 7
	Sub-CLO7	UAS	5		Week 16
	Sub-CLO8	Assignment	1.25		Week 11
		UAS	1.25		Week 16
	Sub-CLO9	Project-based Learning	6		Week 14 and 15
10CLO0342 (4.73%)	Sub-CLO2	UTS	1.36	4.73	Week 8
	Sub-CLO3	UTS	1.37		Week 8
	Sub-CLO4	Quiz	1		Week 4
	Sub-CLO5	UTS	1		Week 8
CLO0636 (4.73%)	Sub-CLO2	UTS	1.36	4.73	Week 8
	Sub-CLO3	UTS	1.37		Week 8
	Sub-CLO4	Quiz	1		Week 4
	Sub-CLO5	UTS	1		Week 8
CLO0824 (10.5%)	Sub-CLO8	Assignment	1.25	10.5	Week 11
		UAS	1.25		Week 16
	Sub-CLO9	Project-based Learning	6		Week 14 and 15
CLO0917 (15.23%)	Sub-CLO2	UTS	1.36	15.23	Week 8
	Sub-CLO3	UTS	1.37		Week 8
	Sub-CLO4	Quiz	1		Week 4
	Sub-CLO5	UTS	1		Week 8

	Sub-CLO8	Assignment	1.25		Week 11
		UAS	1.25		Week 16
	Sub-CLO9	Project-based Learning	6		Week 14 and 15
CLO1015 (11.33%)	Sub-CLO6	Case Method	6.66	11.33	Week 7
	Sub-CLO9	Project-based Learning	6		Week 14 and 15
CLO1137 (23.56%)	Sub-CLO2	UTS	1.36	23.56	Week 8
	Sub-CLO3	UTS	1.36		Week 8
	Sub-CLO4	Quiz	1		Week 4
	Sub-CLO5	UTS	1		Week 8
	Sub-CLO6	Case Method	6.67		Week 7
	Sub-CLO7	UAS	5		Week 16
	Sub-CLO8	Assignment	1.25		Week 11
		UAS	1.25		Week 16
	Sub-CLO9	Project-based Learning	6		Week 14 and 15
CLO1225 (5%)	Sub-CLO7	UAS	5	5	Week 16
Total			100%	100%	

Assessment Plan:

Form of Evaluation	Sub-CLO	Assessment Instrument [Frequency]	Bill (proof)	Assessment Weight (%)
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		Formative	Summative		
Quiz/question and answer	Sub-CLO4, Sub-CLO5 and Sub-CLO8	Assessment rubric [1 times]	-	Quiz answers uploaded to class.usu.ac.id	5
Assignment	Sub-CLO8	Assessment rubric [1 times]	-	Assignments uploaded to class.usu.ac.id	5
Project Based Learning	Sub-CLO6 and Sub-CLO9	-	Assessment rubric [1 times]	Logbook / worksheets / slides uploaded to class.usu.ac.id	30
Case Method	Sub-CLO6 and Sub-CLO9	-	Assessment rubric [1 times]	Logbook / worksheets / slides uploaded to class.usu.ac.id	20
Written exam 1 (UTS)	Sub-CLO1, Sub-CLO2 and Sub-CLO3	-	Assessment rubric [1 time]	Written exam result sheet	20
Written exam 2 (UAS)	Sub-CLO7 and Sub-CLO8	-	Assessment rubric [1 time]	Written exam result sheet	20
Total					100%

Explanation:

a) Quiz 5%

During the semester there will be 1 quizzes held in class. Quizzes will be conducted through e-learning and is scheduled in advance. The material tested is announced by the lecturer and written in the RPS.

b) 5% Assignment

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.



ASSESSMENT RUBRIC

Quiz Scoring Rubric:

Quiz consists of 5 essay questions done on a sheet of paper (done 2 times during 1 semester)

Score per item	Criteria
16-20	Can answer the question correctly, the steps of working on the problem are correct, and completely correct.
11-15	The steps of working on the problem are correct, there are few mistakes
6-10	Most of the steps are correct, there are many errors
0-5	The steps of working on the problem are not correct, unable to solve the problem

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

Teaching Journal/Proposal/Report/Paper Assessment Rubric:

Assessment Criteria	4 Very good	3 Good	2 Simply	1 Less
Understanding of Learning Topics with Resumed Journals	Understand the topic exactly once (25)	Understand the topic (20)	Does not fully and appropriately understand the topic (15)	Not understanding the topic (10)
Contents	Drafts show understanding participants integrate information that has been learned and/or assigned to read during lectures properly and appropriately. (25)	Drafts demonstrate understanding of the material covered and integrate some of the information that has been learned and/or assigned to read during lectures. (20)	Drafts show an understanding of the material covered and only integrate a small portion of the information that has been studied and/or assigned to read during the lecture. (15)	Drafts show a lack of understanding of the material discussed so that it is not clear and does not integrate the material. information that has been learned and/or assigned to read during lectures. (10)

Clarity of Writing	All writing ideas are well and clearly conveyed. (25)	Most of the ideas are well-written and clear. (20)	Some of the ideas are well-written and clear. (15)	The idea of the writing is not conveyed well and clearly. (10)
Language Clarity	Uses foreign/Indonesian language well and correctly few grammatical and word choice errors that do not interfere with understanding. (25)	Uses foreign/Indonesian language well and correctly with few grammatical and word choice errors that interfere with understanding. (20)	Uses foreign/Indonesian language fairly well and correctly with some grammatical and word choice errors. (15)	Does not use foreign/Indonesian language properly and correctly as the writing contains many grammatical and word choice errors. (10)
Total	81-100 (Excellent)	61-80 (Good enough)	41-60 (Enough)	0-40 (Less)

Group Presentation Task Assessment Rubric:

CATEGORIES	4 Very good	3 Good	2 Simply	1 Less
Group Preparation	The group is fully prepared and practices optimal presentation. Mutual complementarity between group members with clear tasks for each group member. (25)	The group seemed reasonably prepared but may need more practice presenting. The responsibilities of each group member need to be identified. (20)	The group made an effort to prepare but did not do any presentation preparation exercises. Tasks and responsibilities are assigned and accepted without careful consideration. (15)	The group seemed to have done no preparation at all for the presentation. Tasks and responsibilities are assigned and accepted randomly. (10)
Presentation Organization	The group presented the content clearly, logically, and systematically, through a	The group presented the content logically and systematically, with an	The group presented the content fairly logically and systematically, but it did not	The group presented the content randomly without any introduction, main idea, or conclusion.

	<p>cohesive introduction, main points, and conclusion.</p> <p>The group used visual aids that effectively supported and reinforced the presentation. (25)</p>	<p>introduction, main idea and conclusion.</p> <p>The group used visual aids that showed a link to the content of the presentation. (20)</p>	<p>contain an introduction, main idea, or conclusion.</p> <p>The group occasionally used visual aids that did not support the content of the presentation. (15)</p>	<p>Groups using unresponsive visual aids or no visual aids at all. (10)</p>
Task Achievement	<p>Each group member is able to demonstrate solid knowledge through their own exposure and elaboration, and deliver the part of the presentation that is assigned to them within the time allotted. (25)</p>	<p>Each group member demonstrates good knowledge through their own exposure and elaboration but in less time than the time allocated to them. (20)</p>	<p>Each group member demonstrated sufficient knowledge but failed to elaborate, and presented his or her part in only half the time allotted to him or her. (15)</p>	<p>Each group member has no knowledge of the content and presents his or her section in less than half the time allocated to him or her. (10)</p>
Mastery of Presentation Content	<p>Each group member demonstrates full understanding of the presentation topic.</p> <p>The main points presented are supported by evidence and critically evaluated. (25)</p>	<p>Each group member demonstrated a good understanding of the presentation topic.</p> <p>Most of the main points are illustrated with relevant evidence. (20)</p>	<p>Each group member demonstrated a good understanding of some aspect of the topic.</p> <p>Some illustrations are given, but not critically evaluated. (15)</p>	<p>Each group member did not seem to understand the presentation topic very well.</p> <p>Some evidence was mentioned, but not integrated in the presentation or evaluated. (10)</p>
Answers to Questions	<p>The group was able to correctly answer almost all the questions asked by the audience about their presentation topic. (25)</p>	<p>The group was able to correctly answer most of the questions asked by the audience about the tropes of their presentation. (20)</p>	<p>The group was able to correctly answer some of the questions the audience asked about their presentation topic. (15)</p>	<p>The group was unable to answer the questions posed by the audience on the topic of their presentation appropriately. (10)</p>

Communication Quality	Group interaction with the audience shows interest and respect for the opinions of others. Responses support 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 others' opinions. (15)	Interaction in the discussion shows disrespect for other people's opinions. Responses do not support effective communication. (10)
Total	81-100 (Excellent)	61-80 (Good enough)	41-60 (Enough)	0-40 (Less)

Source: Halimi, Sicily. "Assessment Rubric: Learning Plan Book MK Introduction to Teaching Methods", 2021

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

Essay Writing Exam Scoring Rubric:

Assessment Criteria	4 Very good	3 Good	2 Simply	1 Less
Understanding of the Question	Understand the question exactly once (25)	Understand the question (20)	Does not understand the question fully and correctly (15)	Did not understand the question (10)
Contents	Answers show understanding participants integrate information that has been learned and/or assigned to read during lectures properly and appropriately. (25)	Answers demonstrate an understanding of the material in question and integrate some of the information learned and/or assigned to read during the lecture. (20)	Answers show a lack of understanding of the material in question and only integrate a small portion of the information that has been studied and/or assigned to read during the lecture. (15)	The answer shows a lack of understanding of the material in question, so it is not clear and does not integrate the material. information that has been learned and/or assigned to read during lectures. (10)
Clarity of Writing	All writing ideas are well and clearly conveyed. (25)	Most of the ideas are well-written and clear. (20)	Some of the ideas are well-written and clear. (15)	The idea of the writing is not conveyed well and clearly. (10)
Language Clarity	Uses foreign/Indonesian language well and correctly few	Uses foreign/Indonesian language well and	Uses foreign/Indonesian language fairly well and	Does not use foreign/Indonesian language

	grammatical and word choice errors that do not interfere with understanding. (25)	correctly with few grammatical and word choice errors that interfere with understanding. (20)	correctly with some grammatical and word choice errors. (15)	properly and correctly as the writing contains many grammatical and word choice errors. (10)
Total	81-100 (Excellent)	61-80 (Good enough)	41-60 (Enough)	0-40 (Less)

Multiple Choice Exam Scoring Rubric:

Score per item	Criteria
100/number of questions	Can answer the question correctly
0	Answers are less precise / not in accordance with the answer key that has been provided

