UNIVERSITAS SUMATERA UTARA (USU)
FACULTY OF AGRICULTURE
Animal Science Study Programme

Document Code
(to follow)

SEMESTER LEARNING PLAN (RPS)

COURSE	CODE	MK family	WEIGHT (credits)	SEMESTER	Date of Preparation
Climatology and Livestock Environment	PTN1205	Exact	2	II	22 February 2024

AUTHORISATION ATTESTATION	Developer Lecturer	Approved Head of Study Programme	Knowing Chairman of LINKUP USU
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Learning Outcomes	**LO-Study Programe Charged to Course**		
	LO01	Graduates can apply basic science and innovative technology in animal husbandry by using logical, critical, systematic, and innovative thinking.	
	LO03	Graduates can disseminate information as a driver of development in the community in the field of animal husbandry in formal and informal institutions.	
	Course Learning Outcomes (CLO)		**CLO Weight**
	CLO0112: Able to explain logically and critically about bioclimate, temperature zone, thermoregulation, environmental influences, adaptation and environmental manipulation on livestock productivity.		50%
	CLO0302: Able to identify problems related to livestock environmental conditions that affect livestock productivity		50%
	End Capability of Each Learning Stage (Sub-CLO)		
	Sub-CLO1	After attending this lecture, students can explain the position of agroclimatology courses in animal production science	
	Sub-CLO2	After attending this lecture, students can explain the weather elements, understanding and benefits of agroclimatology for animal production	
	Sub-CLO3	After attending this lecture, students can explain the impact of the Earth's atmosphere and can distinguish the symptoms and physical changes in each layer of the atmosphere to animal production	
	Sub-CLO4	After attending this lecture, students can explain the rules of air temperature, soil temperature, and solar radiation intensity for animal production	
	Sub-CLO5	After attending this lecture, students can explain the garden tools and weather gauges	

	Sub-CLO6	After attending this lecture, students can explain the The concept of solar radiation - 1
	Sub-CLO7	After attending this lecture, students can explain the Concept of solar radiation - 2
		MID SEMESTER EXAMINATION
	Sub-CLO8	After attending this lecture, students can explain the Air humidity, principles and profiles of air and cloud humidity
	Sub-CLO9	After attending this lecture, students can explain the Air pressure and wind
	Sub-CLO10	After attending this lecture, students can explain the Hydrological cycle
	Sub-CLO11	After attending this lecture, students can explain the Rainfall
	Sub-CLO12	After attending this lecture, students can explain the Climate classification, development, and basis of classification
	Sub-CLO13	After attending this lecture, students can explain the Global climate
	Sub-CLO14	After attending this lecture, students can explain the microclimate
		END-OF-SEMESTER EXAM

Correlation of CLO with Sub-CLO

	Sub-CLO1	Sub-CLO2	Sub-CLO3	Sub-CLO4	Sub-CLO5	Sub-CLO6	Sub-CLO7	Sub-CLO8	Sub-CLO9	Sub-CLO10	Sub-CLO11	Sub-CLO12	Sub-CLO13	Sub-CLO14
CLO0112	√	√	√	√	√	√	√							
CLO0302								√	√	√	√	√	√	√

Brief Course Description

After taking the Climatology and Livestock Environment course, second-semester students of the Animal Husbandry Study Programme will be able to understand the important environmental aspects that affect and are needed in dairy, beef cattle, and poultry farming to create quality livestock.

Study Material:

Learning Materials

1. Position of agroclimatology courses in animal production science
2. Weather elements, understanding and benefits of agroclimatology for animal production
3. Impact of the Earth's atmosphere and can distinguish the symptoms and physical changes in each layer of the atmosphere to animal production
4. Rules of air temperature, soil temperature, and solar radiation intensity for animal production
5. Garden tools and weather gauges
6. The concept of solar radiation – 1
7. Concept of solar radiation – 2
8. Air humidity, principles and profiles of air and cloud humidity
9. Air pressure and wind
10. Hydrological cycle
11. Rainfall

	12. Climate classification, development, and basis of classification 13. Global climate 14. Microclimate
Library	**Main:** 1. Ayoade, J. O. (1983). Introduction to Climatology for the Tropics. London: Longman. 2. Curtis, S. E. (1983). Environmental Management in Animal Agriculture. Ames: Iowa State University Press. 3. Hahn, G. L., & Mader, T. L. (1997). Heat Waves and Their Impacts on Livestock Production. In R. J. Collier & J. L. Collier (Eds.), Environmental Physiology of Livestock (pp. 235–260). Ames: Wiley-Blackwell. 4. Mount, L. E. (1979). Adaptation to Thermal Environment: Man, and His Productive Animals. London: Edward Arno 5. Peni Patriani, Harapin Hafid, Hasnudi, R Edhy Mirwandhono. 2019. Klimatologi dan Lingkungan Ternak (Climatology and Livestock Environment). USU Press. Medan: Indonesia 6. Peni Patriani, Harapin Hafid. 2023. Textbook based on research and community service results with case method problem training - climatology of the livestock environment. CV. Kaizen Sarana Edukasi. Medan. Indonesia 7. Hanum C. 2013. Agricultural Climatology. USU Press. Medan. North Sumatra
	Supporters: 1. Bohmanova, J., Misztal, I., & Cole, J. B. (2007). Temperature-Humidity Indices as Indicators of Milk Production Losses Due to Heat Stress. Journal of Dairy Science, 90(4), 1947–1956 2. Gaughan, J. B., Mader, T. L., Holt, S. M., & Lisle, A. (2008). A New Heat Load Index for Feedlo Cattle. Journal of Animal Science, 86(1), 226–234
Lecturer	Dr Nurzainah Ginting M.Sc Dr Nurjama'yah Br. Ketaren S.Pt, M.Si Ir. Peni Patriani S.Pt., M.P, IPM, ASEAN Eng.
Conditional Subjects	

	End ability of each learning stage (Sub-CLO)	**Assessment**		**Form of Learning; Learning Methods; Student Assignment; [Estimated Time]**		**Study Material (Learning Material)**	**Assessment Weight (%)**
		Indicator	**Criteria and Techniques**				
(1)	**(2)**	**(3)**	**(4)**	**Asynchronous (5)**	**Synchronous (6)**	**(7)**	**(8)**
1	Sub-CLO1: After attending this lecture, students can explain Position of	Accurately explaining information about the. Position of agroclimatology	Criteria: Using an assessment rubric. Shape:	KM+PT (1 week x 3 credits x 120 minutes) **Learning Methods:**	TM (1 week x 2 credits x 50 minutes) **Learning Methods:** a. Lecture	Subject matter: a. Course contract	This sub-CLO will be assessed during

	agroclimatology courses in animal production science	courses in animal production science	a Read the provided passage (book) b Respond to the opening question given. c Answer questions according to the reading.	*Self-Paced Learning* **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	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. Textbook	b. Position of agroclimatology courses in animal production science	Midterm exams
2	Sub-CLO 2: After attending this lecture, students can explain Position of agroclimatology courses in animal production science	a. Accuracy in expressing the required information about Position of agroclimatology courses in animal production science b. Correctness of students' answers (Quiz)	**Criteria:** Essay assessment rubric **Techniques:** Quiz	KM+PT (1 week x 3 credits x 120 minutes) **Learning Methods:** *Self-Paced Learning* **Activities:** *a. Recording attendance* *b. Completing the quiz* ***Quiz 1:***	TM (2 weeks 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 d. Quiz **Media:** a. Slides/ ppt	**Subject matter:** Position of agroclimatology courses in animal production science	Quiz 2,5%

				Quiz to measure student understanding. **Moda (*Learning Management System*):** Class.usu.ac.id	b. Zoom meeting / LCD a. Textbook		
3	Sub-CLO 3: After attending this lecture, students can explain Impact of the Earth's atmosphere and can distinguish the symptoms and physical changes in each layer of the atmosphere to animal production	a. Accuracy in explaining the Impact of the Earth's atmosphere and can distinguish the symptoms and physical changes in each layer of the atmosphere to animal production b. Accuracy in explaining the Impact of the Earth's atmosphere and can distinguish the symptoms and physical changes in each layer of the atmosphere to animal production	**Criteria:** Paper assessment rubric **Techniques:** *test:Tasks*	KM+PT (1 week x 3 credits x 120 minutes) **Learning Methods:** *Self-Paced Learning* **Activities:** *a. Recording attendance* *b. Completing assignment* ***Assignment 1:*** a Review the previous lesson. Read the added teaching materials. b Recording attendance. c Respond to the opening question. *d* 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 d. Presentation **Media:** a. Slides/ ppt b. Zoom meeting / LCD c. Textbook	**Subject matter:** Impact of the Earth's atmosphere and can distinguish the symptoms and physical changes in each layer of the atmosphere to animal production	Tasks : 2,5%

4	Sub-CLO 4: After attending this lecture, students can explain Rules of air temperature, soil temperature, and solar radiation intensity for animal production	a. Accuracy in explaining Rules of air temperature, soil temperature, and solar radiation intensity for animal production b. Accuracy in explaining Rules of air temperature, soil temperature, and solar radiation intensity for animal production c. Accuracy in explaining the *assessment*	**Criteria:** a Worksheet) b Reading a book c Respond to the opening question given by the Practicum **Techniques:** *Non-Test:* Assignment	KM+PT (1 week x 3 credits x 120 minutes) **Learning Methods:** *Self-Paced Learning* **Activities:** *a. Recording attendance* *b. Completing assignment* *c. Practicum* ***Problem-Based Learning 1:*** a. The lecturer divides students into groups. b. Conducting a practicum c. Make a practicum report. **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. Textbook	**Subject matter:** Rules of air temperature, soil temperature, and solar radiation intensity for animal production	This sub-CLO will be assessed during Midterm exams
5	Sub-CLO 5: After attending this lecture, students were able to explain Garden tools and weather gauges	a. Accuracy in providing the required information on Garden tools and weather gauges	**Criteria:** Use essay and multiple-choice assessment rubrics **Techniques:** *Tasks*	KM+PT (1 week x 3 credits x 120 minutes) **Learning Methods:** *Self-Paced Learning*	TM (1 week x 2 credits x 50 minutes) **Learning Methods:** a. Lecture b. Discussion **Activities:**	**Subject matter:** Garden tools and weather gauges	Tasks : 2,5%

		a. Accuracy in doing assignments b. Correctness of students' answers		**Activities:** *a. Recording attendance* *b. Practicum* **Moda (*Learning Management System*):** Class.usu.ac.id	a. Online/offline learning b. Class discussion c. Take notes on learning materials **Media:** a. Slides/ ppt b. Zoom meeting / LCD c. Textbook		
6	Sub-CLO 6: After attending this lecture, students can explain The concept of solar radiation - 1	a. Accuracy in explaining the The concept of solar radiation - 1 b. Accuracy in explaining the The concept of solar radiation - 1	Criteria: a. Worksheet) b. Reading a book c. Respond to the opening question given by the Practicum Shape: Non-test: Assignment	KM+PT (2 weeks x 3 credits x 120 minutes) **Learning Methods:** *Self-Paced Learning* **Activities:** *c. Recording attendance* *d. Completing quizzes and assignments*	TM (2 weeks x 2 credits x 50 minutes) **Learning Methods:** c. Lecture d. Discussion **Activities:** e. Online/offline learning f. Class discussion g. Take notes on learning materials **Media:** c. Slides/ ppt d. Zoom meeting/ LCD Textbook	**Subject matter:** The concept of solar radiation - 1	This sub-CLO will be assessed during Midterm exams
7	Sub-CLO 7 After attending this lecture, students can	a. Accuracy in explaining Concept of solar radiation - 2	**Criteria:** a. Worksheet) b. Reading a book	KM+PT (2 weeks x 3 credits x 120 minutes)	TM (2 weeks x 2 credits x 50 minutes) **Learning Methods:**	**Subject matter:** Concept of solar radiation - 2	This sub-CLO will be assessed during

	explain Concept of solar radiation - 2	b. Accuracy in explaining Concept of solar radiation - 2	c. Respond to the opening question given by the Practicum **Techniques:** *Shape* *Non-test:* *Assignment*	**Learning Methods:** *Self-Paced Learning* **Activities:** - *Recording attendance* - *Deepening the Case* - *Practicum* **Moda (*Learning Management System*):** Class.usu.ac.id	a. Lecture b. Discussion **Activities:** - Online/offline learning - Class discussion - Take notes on learning materials **Media:** - Slides/ ppt - Zoom meeting/ LCD - Textbook		Midterm exams
	MID SEMESTER EXAMINATION (UTS)						20%
8	Sub-CLO 8: After attending this lecture, students are able to explain Air humidity, principles and profiles of air humidity and clouds.	a. Accuracy in explaining Air humidity, principles and profiles of air humidity and clouds. b. Accuracy in explaining Air humidity, principles and profiles of air humidity and clouds.	**Criteria:** Paper assessment rubric **Techniques:** *Test: Quiss*	KM+PT (1 week x 3 credits x 120 minutes) **Learning Methods:** *Self-Paced Learning* **Activities:** *a. Recording attendance* *b. Completing assignment* *c. Practicum* ***Quiz 2:*** Quiz to measure students' understanding of Hardy-Weinberg probability through	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 d. Quiss **Media:** a. Slides/ ppt b. Zoom meeting / LCD c. Textbook	**Subject matter:** 1. Air humidity 2. Principles and profiles of air humidity and clouds.	Quiz: 2,5%

				calculations on several cases **Moda (*Learning Management System*):** Class.usu.ac.id			
9	Sub-CLO 9: After attending this lecture, students can explain the Air pressure and wind	Accuracy in explaining Air pressure and wind	**Criteria:** a. Worksheet) b. Reading a book c. Respond to the opening question given by the Practicum **Techniques:** Non-test: Assignment	KM+PT (1 week x 3 credits x 120 minutes) **Learning Methods:** *Self-Paced Learning* **Activities:** *a. Recording 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. Textbook	**Subject matter:** Air pressure and wind	This sub-CLO will be assessed during Final exams
10	Sub-CLO 10 After attending this lecture, students will be able to explain Hydrological cycle	a. Accuracy in explaining Hydrological cycle b. Accuracy in explaining Hydrological cycle	**Criteria:** a. Worksheet) b. Reading a book c. Respond to the opening question given by the Practicum **Techniques:**	KM+PT (1 week x 3 credits x 120 minutes) **Learning Methods:** *Self-Paced Learning* **Activities:**	TM (1 week x 2 credits x 50 minutes) **Learning Methods:** a. Lecture b. Discussion - **Activities:**	**Subject matter:** Hydrological cycle	This sub-CLO will be assessed during Final exams

			Non-test: Assignment	*b. Recording attendance* **Moda (*Learning Management System*):** Class.usu.ac.id	a. Online/offline learning b. Class discussion c. Take notes on learning materials - **Media:** a. Slides/ ppt b. Zoom meeting / LCD c. Textbook		
11	Sub-CLO 11: After attending this lecture, students will be able to explain the Rainfall	a. Accurately providing the required information about Rainfall b. Accuracy in doing assignments c. Correctness of students' answers	**Criteria:** Essay assessment rubric **Techniques:** *Non-test:* Project Base learning	KM+PT (1 week x 3 credits x 120 minutes) **Learning Methods:** *Self-Paced Learning* **Activities:** *a. Recording attendance* *b. Completing assignment* ***Assignment 2:*** Resume a journal **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 d. PBL **Media:** a. Slides/ ppt b. Zoom meeting / LCD c. Textbook	**Subject matter:** Rainfall	Project Base Learning 30%
12	Sub-CLO 12: After attending this lecture, students will be able to explain Climate	a. Accuracy in providing the required Climate	**Criteria:** Use presentation and paper assessment rubrics	KM+PT (1 week x 3 credits x 120 minutes) **Learning Methods:**	TM (2 weeks x 2 credits x 50 minutes) **Learning Methods:** a. Lecture	**Subject matter:** Climate classification, development, and basis of	Case Method 20%

	classification, development, and basis of classification	classification, development, and basis of Classificatio b. Accuracy in working on the case method	**Techniques:** *Case mathod*	*Self-Paced Learning* **Activities:** Case Method *Deepening the Case* *Case Method :* a. Divide the group evenly (lecturer divides) *b.* Create a *case study* on tanning *c. Case Metthode:* ***d.*** Moda (*Learning Management System*): class.usu.ac.id	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. Textbook	classification	
13	Sub-CLO 13: After attending this lecture, students will be able to explain Global climate	a. Accuracy in providing the information needed b. Accuracy in doing quizzes c. Correctness of students' answers	**Criteria:** Using an assessment rubric **Techniques:** *Non-test:* Assignment	KM+PT (1 week x 3 credits x 120 minutes) **Learning Methods:** *Self-Paced Learning* **Activities:** *a. Recording attendance* *b. Completing assignment* *c. Practicum* **Moda (*Learning Management System*):** Class.usu.ac.id	TM (1 week x 2 credits x 50 minutes) **Learning Methods:** c. Lecture d. Discussion **Activities:** a. Online/offline learning b. Class discussion c. Take notes on learning materials **Media:** a. Slides/ ppt b. Zoom meeting / LCD, Textbook	**Subject matter:** Global climate	This sub-CLO will be assessed during Final exams

14	Sub-CLO14: After attending this lecture, students can explain microclimate	a. Accuracy in providing answers b. Accuracy in doing quizzes c. Correctness of students' answers	**Criteria:** *a. Worksheet/ non test* *b. Reading a book* *c. Respond to the opening question given by the Practicum* **Techniques:** Non-test: Assignment	KM+PT (1 week x 3 credits x 120 minutes) **Learning Methods:** *Self-Paced Learning* **Activities:** *a. Recording attendance* *b. Completing assignment* *c. Practicum* **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, Textbook	Subject matter: microclimate	This sub-CLO will be assessed during Final exams
	FINAL SEMESTER EXAMINATION (UAS)						20%

Assessment Plan:

Form of Evaluation	Sub-CLO	Assessment Instrument [Frequency]		Bill (proof)	Assessment Weight (%)
		Formative	Summative		
Quiz/question and answer	Sub-CLO2 Sub CPLO8	Assessment rubric [2 times]		Quiz answers uploaded to class.usu.ac.id	5
Tasks	Sub-CLO3 Sub-CLO5	Assessment rubric [2 times]		Assignments uploaded to class.usu.ac.id	5
Problem-based Learning	Sub-CLO11	-	Assessment rubric [1 times]	Logbook/worksheets / slides uploaded to class.usu.ac.id	30
Case Method	Sub-CLO12		Assessment rubric [1 times]	Logbook/worksheets / slides uploaded to class.usu.ac.id	20
Written exam 1 (UTS)	Sub-CLO1 and Sub-CLO4 Sub-CLO6 Sub-CLO7	-	Assessment rubric [1 time]	Written exam result sheet	20
Written exam 2 (final exam)	Sub-CLO9 Sub-CLO10 Sub-CLO13 Sub-CPLO12	-	Assessment rubric [1 time]	Written exam result sheet	20
				Total	100%

Explanation:

a) Quiz 5%
   During the semester, there will be four quizzes held in class. The quizzes will be conducted through e-learning and are scheduled in advance. The material tested is announced by the lecturer and written in the RPS.

b) Task 5%
   There will be 2 structured assignments during the semester. The assignments are an effort to add insight by creating a resume related to the material written in the RPS.

c) Project Base Learning 30%
   PBL is a learning method that engages students in solving real-world problems or answering complex questions. Students will work on a group project for 2 weeks.

d) Case Method 20%

e) UTS (mid-test) 20%
   The midterm exam covers all the material covered from the beginning of the semester until the 7th meeting, including reading and lectures. It is conducted in class and includes multiple-choice, short-form, and essay questions.

f) UAS (final-test) 20%
   The end-of-semester exam covers all the material from the 9th to the 15th meeting, both readings and lectures. It is conducted in class and includes multiple-choice, short-form, and essay questions.

ASSESSMENT RUBRIC

Quiz Scoring Rubric:

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

Value per item	Criteria
16-20	I can answer the question correctly, and the steps of working on the problem are correct and entirely correct.
11-15	The steps of working on the problem are correct; there are a few mistakes
6-10	Most of the steps are correct, but there are many errors
0-5	The steps of working on the problem are not correct, and they are 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 learnt and/or assigned to read correctly and appropriately during lectures. (25)	Drafts demonstrate an understanding of the material covered and integrate some of the information learnt 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 learnt and/or assigned to read during the lecture. (15)	Drafts show a lack of understanding of the material discussed, making it unclear and unable to integrate the material. Information that has been learnt 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, with 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)	Do not use the 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 has optimised presentation exercises. 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 tried 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 not prepared at all for the presentation. Tasks and responsibilities are assigned and accepted randomly. (10)
Presentation Organisation	The group presented the content logically and systematically through a cohesive introduction, main points, and conclusion. The group used visual aids that effectively supported and reinforced the presentation. (25)	The group presented the content logically and systematically, with an introduction, main idea and conclusion. The group used visual aids that linked to the presentation's content. (20)	The group presented the content fairly logically and systematically but did not contain an introduction, main idea, or conclusion. The group occasionally used visual aids that did not support the presentation's content. (15)	The group presented the content randomly without any introduction, main idea, or conclusion. Groups using unsupportive visual aids or no visual aids at all. (10)
Task Achievement	Each group member can demonstrate solid knowledge through their exposure and elaboration and deliver the part of the presentation assigned to them within the allotted time. (25)	Each group member demonstrates good knowledge through their own exposure and elaboration but in less time than the time allocated. (20)	Each group member demonstrated sufficient knowledge but needed to elaborate and present his or her part in only half the time allotted to him or her. (15)	Each group member knows nothing about the content and presents his/her section in less than half the time allocated to him/her. (10)

Mastery of Presentation Content	Each group member demonstrates a full understanding of the presentation topic. The main points presented are supported by evidence and critically evaluated. (25)	Each group member demonstrated a good understanding of the presentation topic. Most of the main points are illustrated with relevant evidence. (20)	Each group member demonstrated a good understanding of some aspect of the topic. Some illustrations are given but not critically evaluated. (15)	Each group member did not seem to understand the presentation topic very well. Some evidence was mentioned but not integrated into the presentation or evaluated. (10)
Answers to Questions	The group could correctly answer almost all the questions asked by the audience about their presentation topic. (25)	The group correctly answered most of the audience's questions about the tropes of their presentation. (20)	The group could correctly answer some of the audience's questions about their presentation topic. (15)	The group could not answer the questions the audience posed on the topic of their presentation appropriately. (10)
Communication Quality	Group interaction with the audience shows interest and respect for the opinions of others. Responses support effective communication. (25)	Group interaction with an 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 learnt and/or not assigned to read properly and appropriately during lectures. (25)	Answers demonstrate an understanding of the material in question and integrate some of the information learnt 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 unclear and does not integrate the material. Information that has been learnt and/or assigned to read during lectures. (10)
Clarity of Writing	All writing ideas are well 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, with 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)	Do not use the 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)**

Multiple Choice Exam Scoring Rubric:

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