



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

**Documen
Code
(Follow)**

SEMESTER LEARNING PLAN

COURSE	CODE	Course Group	credits		SEMESTER	Date of Compilation
Animal Health Science and Veterinary Society	PTN2103	Exact	Theory =2	Practice =1	III	October 2022
AUTHORIZATION / APPROVAL	Semester learning plan developer Lecturer		Vice Dean I		Chairman of LINK-UP USU	
			Dr. Lisnawita, SP, MP		Prof. Dr. Dwi Suryanto M.Sc.	
Learning Outcomes	Learning Outcomes (LO)					
	LO03	Able to identify, formulate, and find solutions to problems related to the livestock sector				
	LO08	Able to manage integrated and sustainable livestock farming based on integration with other agro-ecosystems as well as latest applications in processing livestock products and waste.				
	LO11	Able to develop, understand and apply a variety of the best techniques and methods that combine theory and practice related to livestock expertise.				
	LO12	Have coherent and up-to-date knowledge in the field of animal science and in accordance with applicable legal regulations can apply aspects of animal welfare.				
	LO14	Able to communicate effectively both verbally and in writing to the public while respecting cultural diversity, views and opinions nationally and globally.				
	Course Learning Outcomes (CLO)					CLO Credit
	CLO0305: Able to explain the various types of diseases that infect livestock along with methods of prevention and control as well as problems and activities related to veterinary public health.					15%
CLO0801: Able to explain the concept, legal basis, function, purpose of various problems and activities related to veterinary public health and analyze various supervision, identification and					15%	


	examination of food ingredients such as meat, eggs and milk which are considered to cause public health problems.						
	CLO1103: Able to master the livestock disease control management system and sanitation system as an effort to prevent livestock disease and efforts to prevent transmission to humans.	20%					
	CLO1204: Able to explain various types of livestock diseases and how to deal with them based on applicable legal basis and prioritizing aspects of animal welfare and its relation to veterinary public health.	30%					
	CLO1403: Able to communicate effectively in efforts to overcome veterinary public health problems.	20%					
Final Ability of Each Learning Stage (Sub-CLO)							
Sub-CLO1	After taking this course, students will be able to explain about the scope and role of animal health science in supporting knowledge in the field of animal husbandry						
Sub-CLO2	After taking this course, students will be able to explain about diseases caused by bacteria, viruses, parasites						
Sub-CLO3	After taking this course, students will be able to explain about health problems in ruminant and non-ruminant livestock						
Sub-CLO4	After taking this course, students will be able to explain about health problems in poultry						
Sub-CLO5	After taking this course, students will be able to explain disease control management						
Sub-CLO6	After taking this course, students will be able to explain disease prevention and health control programs for livestock in pen and on ranches						
Correlation of CLO with Sub-CLO							
		Sub-CLO1	Sub-CLO 2	Sub-CLO 3	Sub-CLO4	Sub-CLO5	Sub-CLO6
	CLO0305		√				
	CLO0801	√	√				
	CLO1103		√			√	
	CLO1204			√	√		
	CLO1403					√	√

Brief Description of Course	This course is designed to equip students to be able to explain about the various diseases that commonly infect livestock along with methods of prevention and control as well as various problems and activities related to veterinary public health						
Study Material:	BK02 Basic Science of Animal Husbandry BK03 Animal Production Science						
Learning materials	<ol style="list-style-type: none"> 1. The role of animal health science in supporting knowledge in the field of animal husbandry 2. Diseases caused by bacteria, viruses, parasites 3. Health disorders in ruminant and non-ruminant livestock 4. Health problems in poultry 5. Disease control management 6. Disease prevention and livestock health control in pens and on the ranch 						
References	Main: <ol style="list-style-type: none"> 1. Anggo Sudarisman, 2003. Congenital Transmission of Infectious Bovine Rhinotracheitis (IBR) in Cattle and Buffalo in Indonesia. Wartazoa Vol. 17 No. 1 Th. 2007 2. Blaha, T., 1989. Applied Veterinary Epidemiology. Development in Animal and Veterinary Sciences, 21. Elsevier. Amsterdam-Oxford-New York-Tokyo. 3. Seddon, H.R. 1976 . Diseases of domestic animals in Australia part 3. Arthropod Infestations (Ticks and mites) . Service publication (Veterinary Hygiene) No. 7: 170. 4. Subronto 2007 Animal Disease Science II, publisher: Gajah Mada University Press 5. Basic Textbook of Animal Health 2013, Ministry of Education and Culture of the Republic of Indonesia 						
	Supporters: <ol style="list-style-type: none"> 1. 						
Supporting lecturer							
Required Courses							
	Final ability of each learning stage (Sub-CLO)	Evaluation		Form of Learning; Learning methods; Student Assignments; [Estimated Time]		Study Materials	Assessment Criteria (%)
		Indicator	Criteria and Techniques	Asynchronous (5)	Synchronous (6)		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	Sub-CLO1:	Accuracy in explaining	Criteria: -	KM+PT (1 week x 2 credits x 120 minutes)	TM (1 week x 2 credits x 50 minutes)	Subject: - Scope of animal	0%

	After taking this course, students will be able to explain about the scope and role of animal health science in supporting knowledge in the field of animal husbandry	<ul style="list-style-type: none"> - Scope of animal health science - The role of animal health science in supporting knowledge in the field of animal husbandry 	Technique: <i>Non-test</i>	Learning methods: <i>Self-Paced Learning</i> Activity: <ul style="list-style-type: none"> a. Attendance presence b. Download and read the Syllabus (RPS), Learning Implementation Plan (SAP), Course Agreement, and Learning Materials Mode (Learning Management System): class.usu.ac.id	Learning methods: <ul style="list-style-type: none"> a. Lecture b. Discussion Activity: <ul style="list-style-type: none"> a. Online/offline learning b. Class discussion c. Make notes about learning materials Media: <ul style="list-style-type: none"> a. Slides/ ppt b. Zoom meeting/ LCD c. Text book 	health science - The role of animal health science in supporting knowledge in the field of animal husbandry	
2-5	Sub-CLO2: After taking this course, students will be able to explain about diseases caused by bacteria, viruses, parasites	Accuracy in explaining various diseases and their control	Criteria: - Technique: Non-test	KM+PT (2 weeks x 2 credits x 120 minutes) Learning methods: <i>Self-Paced Learning</i> Activity: <ul style="list-style-type: none"> a. Recording attendance b. Completing the quiz Case method 1 <ul style="list-style-type: none"> a. Students are divided into several groups 	TM (2 weeks x 2 credits x 50 minutes) Learning methods: <ul style="list-style-type: none"> a. Lecture b. Discussion Activity: <ul style="list-style-type: none"> a. Online/offline learning b. Class discussion c. Make notes about learning materials d. Presentation Media: <ul style="list-style-type: none"> a. Slides/ ppt 	Subject: <ul style="list-style-type: none"> - Introduction to terminology in animal health science - Understanding healthy animals - Understanding unhealthy/sick animals - Understanding viruses 	Case Meth 20% Midte Exam

			<p>b. Students visit farms and observe livestock that are infected with disease.</p> <p>c. Students identify the causes of disease (bacteria, viruses, and parasites),</p> <p>d. Conducting an in-depth analysis of the symptoms, causes, transmission, prevention and treatment.</p> <p>e. Students make reports and present them.</p> <p>Mode (Learning Management System): class.usu.ac.id</p>	<p>b. Zoom meeting/ LCD</p> <p>c. Text book</p>	<ul style="list-style-type: none"> - Various types of viral diseases - Viral disease control efforts - Understanding bacteria - Various types of bacterial diseases - Bacterial control efforts - Understanding parasites - Various types of parasitic diseases - Parasite control efforts
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6-7	<p>Sub-CLO 3:</p> <p>After taking this course, students will be able to explain about health problems in ruminant and non-ruminant livestock</p>	<p>Accuracy in explaining health disorders in ruminant and non-ruminant livestock</p>	<p>Criteria: Using assessment rubrics</p> <p>Technique: Quiz</p>	<p>KM+PT (2 weeks x 2 credits x 120 minutes)</p> <p>Learning methods: <i>Self-Paced Learning</i></p> <p>Case method 1</p> <p>f. Students are divided into several groups</p> <p>g. Students are given honey bee farming conditions</p> <p>h. Students identify the management of the honey bee farm.</p> <p>i. Students make reports and present them.</p> <p>Mode (Learning Management System): class.usu.ac.id</p>	<p>TM (2 weeks x 2 credits x 50 minutes)</p> <p>Learning methods:</p> <p>a. Lecture b. Discussion</p> <p>Activity:</p> <p>b. Online/offline learning c. Class discussion d. Make notes about learning materials</p> <p>Media:</p> <p>a. Slides/ ppt b. Zoom meeting/ LCD c. Text book</p>	<p>Subject: Health disorders in ruminant and non-ruminant livestock</p> <ul style="list-style-type: none"> - Digestive system disorders - Skin and limb health disorders - Respiratory system disorders - Reproductive health disorders 	<p>Midt Exam Assign t 5%</p>
8	MID SEMESTER EXAMINATION						
9-10	<p>Sub-CLO 4:</p> <p>After taking this course, students will be able to explain about health problems in poultry</p>	<p>Accuracy in explaining health problems in poultry</p>	<p>Criteria: Using assessment rubrics</p> <p>Technique: Quiz</p>	<p>KM+PT (2 weeks x 2 credits x 120 minutes)</p> <p>Learning methods: <i>Self-Paced Learning</i></p>	<p>TM (2 weeks x 2 credits x 50 minutes)</p> <p>Learning methods:</p> <p>a. Lecture b. Discussion</p>	<p>Subject:</p> <ul style="list-style-type: none"> - Digestive system disorders 	<p>PJB 20%</p>

				<p>Activity:</p> <ol style="list-style-type: none"> <i>Recording attendance</i> <i>Completing the quiz</i> <i>Practicum</i> <p>Case method 2</p> <ol style="list-style-type: none"> Students are divided into several groups Student looking for some chickens that show symptoms of being infected with the disease Students identify disease symptoms visually Students conduct an examination Post-mortem examination to diagnose disease Students take notes and document Students make reports and present them. <p>Mode (Learning Management System): class.usu.ac.id</p>	<p>Activity:</p> <ol style="list-style-type: none"> Online/offline learning Class discussion Make notes about learning materials <p>Media:</p> <ol style="list-style-type: none"> Slides/ ppt Zoom meeting/ LCD <p>Text book</p>	<ul style="list-style-type: none"> - Respiratory system disorders - Reproductive health disorders
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11-13	<p>Sub-CLO 5:</p> <p>After taking this course, students will be able to explain disease control management</p>	<p>Accuracy in understanding disease control management</p>	<p>Criteria: R Assessment section</p> <p>Technique: Quiz</p>	<p>KM+PT (5 weeks x 2 credits x 120 minutes)</p> <p>Learning methods: <i>Self-Paced Learning</i></p> <p>Case method 3</p> <ol style="list-style-type: none"> Students are divided into several groups Students carry out practices on sanitation of cages and the environment in the Animal Husbandry Study Program Students observe each step in carrying out sanitation Students take notes and document Students make reports and present them. <p>Mode (Learning Management System): class.usu.ac.id</p>	<p>TM (2 weeks x 2 credits x 50 minutes)</p> <p>Learning methods:</p> <ol style="list-style-type: none"> Lecture Discussion <p>Activity:</p> <ol style="list-style-type: none"> Online/offline learning Class discussion Make notes about learning materials Presentation <p>Media:</p> <ol style="list-style-type: none"> Slides/ ppt Zoom meeting/ LCD Text book 	<p>Subject</p> <ul style="list-style-type: none"> - Prevention management - Management of countermeasures - Sanitation of the cage - Environmental sanitation - Quarantine - Quarantine system concept 	<p>PJB 10% Final E 10%</p>
14-15	<p>Sub-CLO 6:</p>	<p>Accuracy in explaining disease prevention and</p>	<p>Criteria: -</p>	<p>KM+PT (5 weeks x 2 credits x 120 minutes)</p>	<p>TM (2 weeks x 2 credits x 50 minutes)</p>	<p>Subject</p>	<p>Final E 10% Quiz</p>

	<p>After taking this course, students will be able to explain disease prevention and health control programs for livestock in pens and on ranches</p>	<p>health control programs for livestock in pens and on ranches</p>	<p>Technique: -</p>	<p>Learning methods: <i>Self-Paced Learning</i></p> <p>Quiz : Quiz to measure students' understanding of the topic disease prevention and health control of livestock in pens and on the ranch</p> <p>Mode (Learning Management System): class.usu.ac.id</p>	<p>Learning methods: c. Lecture d. Discussion</p> <p>Activity: e. Online/offline learning f. Class discussion g. Make notes about learning materials h. Presentation</p> <p>Media: d. Slides/ ppt e. Zoom meeting/ LCD f. Text book</p>	<ul style="list-style-type: none"> - Various things that affect the health of livestock on the ranch - Disease control management on the ranch - Various things that affect the health of livestock in pens - Disease control management in the pen 	
16	FINAL SEMESTER EXAMINATION						209

CLO Code and Percentage	CLO0305:15%		CLO0801: 15%		CLO1103:20%			CLO1204:30%		CLO1403:20%			
CLO Sub Code	Sub- CLO2		Sub- CLO2	Sub- CLO6	Sub- CLO2	Sub- CLO5		Sub- CLO3	Sub- CLO4		Sub- CLO	Sub- CLO6	
Evaluation Form	MID TEST	PJBL	Case Method	Quiz	Case Method	Case Method	FINAL TEST	MID TEST	PJBL		PJBL	Assignment	FINAL TEST
Percentage	10%	5%	10%	5%	5%	5%	10%	10%	20		5%	5%	10%
Total	15%		15%		20%			30%		20%			
Implementation of Evaluation	Week 8	Week 3	Week 4	Week 15	Week 5	Week 12	Week 16	Week 8	Week 10		Week 12	Week 3	Week 16



ASSESSMENT PLAN

Evaluation Form	Sub-CLO	Assessment Instrument [Frequency]		Invoice	Assessment Course (%)
		Formative	Summative		
Quiz	Sub-CLO 6	-	MCQ test rubric [1 time]	Quiz sheets uploaded to USU LMS	5%
Assignment	Sub-CLO 3	-	Assessment rubric [1 time]	Assignments uploaded to USU LMS	5%
Case Method	Sub-CLO 2,5	Feedback results report [2 times]	Report assessment rubric [2 times]	Reports uploaded to USU LMS	20%
Project-Based Learning	Sub-CLO 2,4,5	Feedback results report [1 times]	Report assessment rubric [1 times]	Reports uploaded to USU LMS	30%
Midterm Exam	Sub-CLO 2,4	-	Essay Assessment Rubric [1 time]	Mid-term exam scores	20%
Final Exam	Sub-CLO 6,7	-	Essay Assessment Rubric [1 time]	Final Exam Score	20%
				Total	100%



Explanation:

a) Quiz 5%

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

b) Assignment 5%

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

c) Case Method 20%

During one semester there will be a case method, students will analyze the given case and write it in the form of a report. The case method in this course is carried out 2 times. The report that has been made will be presented by students. Students will be assessed according to their presentation skills and accuracy in the presentation, as well as their participation in the question and answer session when other groups are presenting.

d) Project-Based Learning 30%

During the semester there will be project based learning, students make project in groups. Project based learning in this course is done 1 times. The report that have been made will be presented by students. Students will be assessed according to their presentation skills and accuracy in the presentation, as well as their participation in the question and answer session when other groups are presenting.

e) Midterm Exam 20%

The midterm exam covers all the materials that have been discussed since the beginning of the semester until the 7th meeting, both reading and lecture. This exam is conducted in class with multiple choice questions, short answers, and essays.

f) Final Exam 20%

The final semester exam covers all the materials that have been discussed since the 9th to 15th meeting, both reading and lecture. This exam is conducted in class with multiple choice questions, short answers, and essays.

ASSESSMENT RUBRIC

Post Test Quiz Assessment Rubric (10%)

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

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

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

Minimum score = 25 (5 questions x 5 points)

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

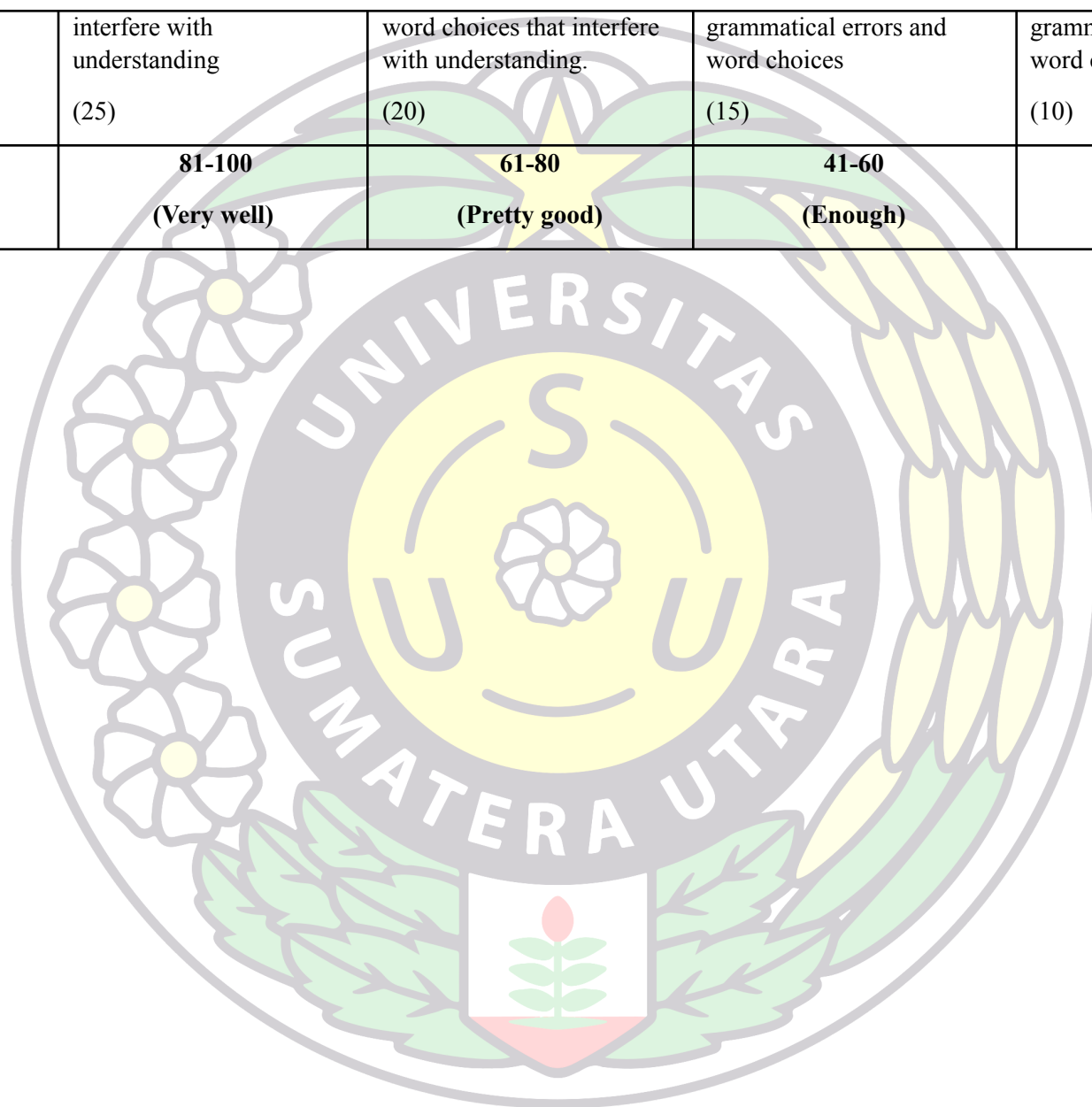
Quiz score 2: (maximum score is 100) $20 \times \sum \text{nilai per butir soal}$

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

Essay Exam Assessment Rubric:

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

	interfere with understanding (25)	word choices that interfere with understanding. (20)	grammatical errors and word choices (15)	grammatical errors and word choices (10)
Total	81-100 (Very well)	61-80 (Pretty good)	41-60 (Enough)	0-40 (Not enough)



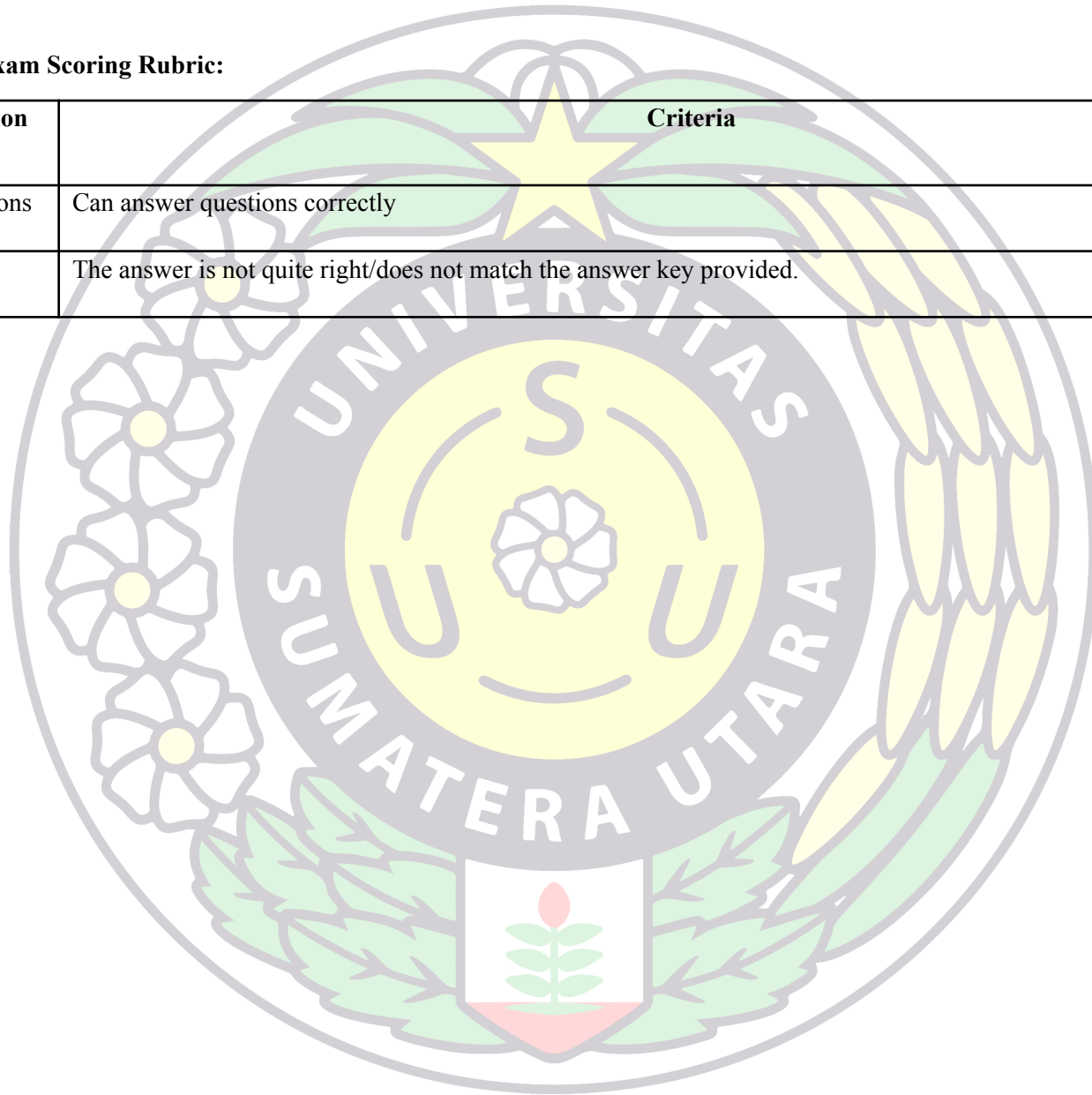
Presentation Assessment Rubric

CATEGORY	4 Very good	3 Good	2 Enough	1 Not enough	Mark
Group Preparation	<p>The group fully prepared themselves and performed optimal presentation exercises.</p> <p>Complement each other between group members with clear tasks for each group member.</p>	<p>The group seemed fairly prepared but may need more presentation practice.</p> <p>The responsibilities of each group member need to be identified.</p>	<p>The group made efforts to prepare themselves but did not practice presentation preparation.</p> <p>Tasks and responsibilities are assigned and accepted without due consideration.</p>	<p>The group did not appear to have prepared at all for their presentation.</p> <p>Tasks and responsibilities are assigned and accepted randomly.</p>	4
Presentation Organization	<p>The group presents the content clearly, logically, and systematically, through an introduction, main ideas, and a cohesive conclusion.</p> <p>Groups use effective visual aids to support and strengthen presentations.</p>	<p>The group presents the content logically and systematically, through an introduction, main ideas and conclusion.</p> <p>Groups use visual aids that show a connection to the content of the presentation.</p>	<p>The group presents the content in a fairly logical and systematic manner, but does not contain an introduction, main ideas, or conclusion.</p> <p>The group occasionally used visual aids that did not support the content of the presentation.</p>	<p>Groups present the content randomly without any introduction, main ideas, or conclusions.</p> <p>The group used visual aids that were not supportive or had no visual aids at all.</p>	3
Task Achievement	<p>Each group member is able to demonstrate solid knowledge through their respective presentations and elaborations, and deliver the part of the</p>	<p>Each group member demonstrated good knowledge through their respective presentations and elaborations but in a</p>	<p>Each group member demonstrated sufficient knowledge but failed to provide elaboration, and presented his part in only</p>	<p>Each group member had no knowledge of the content and presented their respective sections in less than half the time allocated to them.</p>	

	presentation that is their task according to the time allocation.	shorter time than the time allocated for them.	half the time allocated to him.		
Presentation Content Mastery	<p>Each group member demonstrated full understanding of the presentation topic.</p> <p>The main ideas presented are supported by evidence and critically evaluated.</p>	<p>Each group member showed a good understanding of the presentation topic.</p> <p>Most of the main ideas are illustrated with relevant evidence.</p>	<p>Each group member demonstrated a good understanding of some aspects of the topic.</p> <p>Some illustrations are given, but not critically evaluated.</p>	<p>Each member of the group did not appear to understand the presentation topic very well.</p> <p>Some evidence is mentioned, but not integrated into the presentation or evaluated.</p>	
Answers to Questions	The group was able to correctly answer almost all of the questions asked by the audience about their presentation topic.	The group was able to answer most of the questions asked by the audience about the topic of their presentation correctly.	The group was able to answer several questions asked by the audience about their presentation topic appropriately.	The group was unable to answer questions asked by the audience about their presentation topic appropriately.	
Communication Quality	Group interaction with the audience shows interest and respect for the opinions of others. The responses given support effective communication.	Group interaction with the audience shows interest and respect for the opinions of others. Responses generally support effective communication.	Some parts of the interaction in the discussion show interest and respect for other people's opinions.	Interaction in discussion shows disrespect for other people's opinions. Responses do not support effective communication.	

Multiple Choice Exam Scoring Rubric:

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



REPORT ASSESSMENT RUBRIC

Task	Description	Very good > 80	Good 70 -79	Enough 60 – 69	Not enough < 60	Mark
	Scale	4	3	2	1	
1. Background behind the issues raised	<ul style="list-style-type: none"> Describes various phenomena Situation Analysis Formulation of the problem 	<ul style="list-style-type: none"> The phenomenon raised very clear Analysis very sharp situation Formulation of the problem very precise 	<ul style="list-style-type: none"> The phenomenon raised is clear Analysis sharp situation Correct problem formulation 	<ul style="list-style-type: none"> The phenomenon raised unclear Analysis less sharp situation Formulation of the problem less precise 	<ul style="list-style-type: none"> The phenomenon raised unclear Analysis non-sharp situation Formulation incorrect problem 	
2. Literature Review	<p>Accuracy use of literature</p> <p>Using the most recent literature (Journals: last 5 years; Books: last 10 years)</p>	<p>Use theory/resources are very appropriate</p> <p>Use literature from journals: 80 %</p>	<p>Use appropriate theory/resources</p> <p>Use literature from journals: 60 -70%</p>	<p>Use theory/source library less precise</p> <p>Using literature from journals: 50%</p>	<p>Use theory/source library not exactly</p> <p>Using literature from journals: < 50 %</p>	
3. Implementation Method	Schedule time of activities	Schedule time activities are very much in accordance with the schedule that has been set determined	Schedule time activity in accordance with the schedule that it has been determined	Schedule time activities are not in accordance with the schedule it has been determined	Schedule time activities do not match the schedule it has been determined	

	Division of tasks for each member	Distribution each member's duties group very clear	Distribution each member's duties clear group	Distribution each member's duties group unclear	Distribution each member's duties group unclear	
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