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

Document Code

SEMESTER LEARNING PLAN

COURSE (Course)	CODE	MK Group	WEIGHT (credits)		SEMESTER	Date of Compilation
FEED INGREDIENTS AND RATION FORMULATIONS	PTN 2102	Exact	**Theory** =2	**Practice** =1	III(THREE)	**October 23, 2024**

	RPS Developer Lecturer	Vice Dean I	Chairman of LINK-UP USU
AUTHORIZATION / APPROVAL		Dr. Lisnawita, SP, MP	Prof. Dr. Dwi Suryanto M.Sc.

Learning Outcomes	**Learning Outcomes – Charged to Course Group**	
	LO03	Able to identify, formulate, and find solutions to problems related to the livestock sector
	LO06	Conduct supervision and evaluation of the completion of assigned work and be able to manage lifelong learning independently
	LO09	Able to manage and implement aspects of efficient feed provision and technology
	LO11	Able to develop, understand and apply a variety of the best techniques and methods that combine theory and practice relevant to livestock expertise.
	Course Learning Outcomes (CLO)	**CLO Weight**
	CLO0304: Able to explain the classification of feed ingredients and their relationship to the nutritional content of livestock	15%
	CLO0602: Able to analyze various methods in evaluating feed ingredients	50%
	CLO0902: Able to apply various feed formulation methods in the application of the latest technology/software	25%

	CLO1102: Able to implement the latest developments in the use of feed ingredients for livestock	10%

Final Ability of Each Learning Stage (Sub-CLO)

Sub-CLO1	After taking this lecture, students will be able to formulate a concept map of feed ingredients and ration formulation.
Sub-CLO2	After taking this lecture, students will be able to formulate the classification and sources of feed materials.
Sub-CLO3	After taking this course, students will be able to formulate the nutrient content of feed ingredients.
Sub-CLO4	After taking this lecture, students will be able to formulate feed ingredients as sources of energy and protein.
Sub-CLO5	After taking this course, students will be able to formulate feed ingredients as sources of vitamins and minerals.
Sub-CLO6	After taking this course, students will be able to formulate non-nutritional feed additives.
Sub-CLO7	After taking this course, students will be able to formulate additional nutritional feed (feed supplements)
Sub-CLO8	After taking this course, students will be able to formulate livestock nutritional needs and feed ingredient requirements.
Sub-CLO9	After taking this course, students will be able to formulate and create ration formulations for various livestock.
Sub-CLO10	After taking this course, students will be able to formulate evaluations of physical, chemical and biological ration quality.

Correlation of CLO with Sub-CLO

	Sub-CLO 1	Sub-CLO 2	Sub-CLO 3	Sub-CLO 4	Sub-CLO 5	Sub-CLO 6	Sub-CLO 7	Sub-CLO 8	Sub- CLO 9	Sub-CLO 10
CLO 0304	√								√	√
CLO 0602	√	√	√	√	√	√	√	√	√	√
CLO 0902			√			√	√	√	√	
CLO 1102									√	√

Brief Description of Course

After taking the course on Feed Ingredients and Ration Formulation in semester III, the Animal Husbandry Study Program will be able to classify feed ingredients and their nutritional content in their use for compiling livestock rations.

Study Material:

CM04 Animal Nutrition and Feed Science

1. Concept map of feed ingredients and ration formulation
2. Classification and sources of feed ingredients
3. Nutrient content of feed ingredients

Learning materials	4. Feed ingredients as a source of energy and protein 5. Feed ingredients source of vitamins and minerals 6. Non-nutritional supplementary feed 7. Nutritional supplementary feed 8. Nutritional needs 9. Feed ingredient requirements 10. Ration formulation 11. Evaluation of ration quality
Library	**Main:** 1. NRC (National Research Council). 1988. Nutritional Requirements of Dairy Cattle. 6 th revised Edition. Washington DC : National Academy Press. 2. Despal, IG Permana, T. Toharmat and DE Amirroennas, 2017. Silage for dairy cattle feed. Bogor: IPB Press
	Supporters: 1. Journals and publications 2. 2020. Feed Ingredients and Formulation. Rations. Yogyakarta. Gadjah Mada University Press. 3. Sudrajat., Riyanti, Lilis 2019. Textbook of Animal Nutrition and Feed. Center for Agricultural Education. Bppsdmp 4. Yohannis LR Tulung., Abraham F. Pendong., Jolla JM Londok., Catherine A. Rahasia., Sony AE 2022. Moningkey Animal Nutrition Science and Feed Material Knowledge. Patra Media Grafindo Bandung 5. Eko Widodo. 2017. Science of Animal Feed Ingredients and Poultry Feed Formulation. Malang. Ub Press 6. Related research journals
Supporting lecturer	
Required Courses	-

Week	**Final ability of each learning stage (Sub-CLO)**	**Evaluation**		**Form of Learning; Learning methods; Student Assignments; [Estimated Time]**		**Study Materials (Learning materials)**	**Assessment Weight (%)**
		Indicator	**Criteria and Techniques**				
(1)	**(2)**	**(3)**	**(4)**	**Asynchronous (5)**	**Synchronous (6)**	**(7)**	**(8)**

1	**Sub-CLO1:** Students can formulate General overview of feed ingredients and ration formulation to support knowledge in the field of animal husbandry	1.Accuracy in formulating the definition of feed ingredients 2.Accuracy in formulating the definition of formulation 3.Accuracy in formulating feed ingredient factors 4.Accuracy in formulating the relationship between feed ingredients and ration formulation	**Criteria:** - **Technique:** Non-Test	KM+PT (1 week x 2 credits x 120 minutes) **Activity:** 1. Attendance absence 2. Download and read the Syllabus (RPS), Learning Implementation Plan (SAP), Course Agreement, and Learning Materials. **Learning methods:** *Self-Paced Learning* **Mode (Learning Management System):** elearning@usu.ac.id	TM (1 week x 2 credits x 50 minutes) **Activity:** *1. Offline Learning* *2. Class Discussion* *3. Note Taking* **Media:** *1. Power Point Presentation* *2. Text Book* **Learning methods**: *1. Lecturer* *2. Discussion* 3. *Self-Paced*	**Subject:** 1. Study Contract *2.* Scope of feed ingredients and ration formulation *3.* Scope of feed processing technology *4.* Benefits of processing technology	0%
2	**Sub-CLO 2:** Students can formulate classification of feed ingredients, sources of feed ingredients and benefits of feed and ration formulation.	5.Accuracy in formulating feed material classification 6.Accuracy in formulating feed ingredient sources 7.Accuracy in formulating feed benefits 8.Accuracy in formulating ration formulations	**Criteria:** Assessment rubric. **Technique:** *Non-Test*	KM+PT (1 week x 2 credits x 120 minutes) **Activity:** 1.Attendance absence 2.Download and read the Syllabus (RPS), Learning Implementation Plan (SAP), Course Agreement, and Learning Materials. 3.Responding to the opening question **Mode (Learning Management System):**	TM (1 week x 2 credits x 50 minutes) **Activity:** *1. Offline Learning* *2. Class Discussion* *3. Note Taking* **Media:** *1. Power Point Presentation* *2. Text Book* **Learning methods**: *1. Lecturer* *2. Discussion* 3. *Self-Paced*	**Subject:** 1. Classification of feed ingredients 2. Source of feed ingredients 3. Benefits of feed 4. Benefits of ration formulation 5. Benefits of rations	5%

				elearning@usu.ac.id			
3	**Sub-CLO 3:** After taking this course, students will be able to formulate feed nutrition including macronutrients, micronutrients and their benefits.	1. Accuracy in explainingfeed ingredient nutrition 2. Accuracy in formulating macronutrients 3. Accuracy in formulating micronutrients 4. Accuracy in formulating the benefits of macro and micro nutrients	**Criteria:** Assessment rubric. **Technique:** *Test:* *1. Case method*	KM+PT (1 week x 2 credits x 120 minutes) **Activity:** 1. Attendance absence 2. Download and read the Syllabus (RPS), Learning Implementation Plan (SAP), Course Agreement, and Learning Materials. 3. Responding to the opening question ***Case Method 1:*** 1. Divide the groups evenly (the lecturer divides) 2. Create a paper on feed nutrition with a maximum of 15 pages from the table of contents to the bibliography, TMR font size 12, 1.5 spacing, sent in PDF format. 3. Group presentation **Mode (Learning Management System):** elearning@usu.ac.id	TM (1 week x 2 credits x 50 minutes) **Activity:** *1. Offline Learning* *2. Class Discussion* *3. Note Taking* **Media:** *1. Power Point Presentation* *2. Text Book* **Learning methods**: *1. Lecturer* *2. Discussion* *3. Self-Paced*	**Subject:** 1. Definition of feed ingredient nutrition 2. Macro nutrients 3. Micro nutrients 4. Nutritional benefits of feed ingredients	Case Method 1: 10%

4-5	**Sub-CLO 4:** After taking this lecture, students will be able to formulate feed ingredients as sources of energy and protein.	1. Accuracy in explainingenergy feed source 2. Accuracy in explaining the types of energy feed ingredients 3. Accuracy in explaining the benefits of energy feed ingredients 4. Accuracy in explaining the sources of protein feed ingredients 5. Accuracy in explaining the types of protein feed sources 6. Accuracy in explaining the benefits of protein feed sources	**Criteria:** Assessment rubric. **Technique:** *Test:* *1. Quiz*	KM+PT (2 week x 2 credits x 120 minutes) **Activity:** 1. Attendance absence 2. Download and read the Syllabus (RPS), Learning Implementation Plan (SAP), Course Agreement, and Learning Materials. 3. Responding to the opening question ***Quiz 1:*** *Quiz to measure students' understanding of protein as a nutrient needed by poultry* **Mode (Learning Management System):** elearning@usu.ac.id	TM (2 week x 2 credits x 50 minutes) **Activity:** *1. Offline Learning* *2. Class Discussion* *3. Note Taking* **Media:** *1. Power Point Presentation* *2. Text Book* **Learning methods**: *1. Lecturer* *2. Discussion* *3. Self-Paced*	**Subject:** **1.** Energy source feed ingredients **2.** Protein source feed ingredients **3.** Types of energy sources **4.** Types of protein sources **5.** Benefits of energy sources **6.** Benefits of protein sources	Quiz 1: 5%
6-7	**Sub-CLO 5:** After taking this course, students will be able to formulate mineral and vitamin feed ingredients.	7. Accuracy in explainingsource of feed ingredients source of minerals 8. Accuracy in explaining the	**Criteria:** Assessment rubric. **Technique:** *Test:* *1. Case method*	KM+PT (2 week x 2 credits x 120 minutes) **Activity:** 4. Attendance absence 5. Download and read the Syllabus (RPS), Learning Implementation Plan	TM (1 week x 2 credits x 50 minutes) **Activity:** *4. Offline Learning* *5. Class Discussion* *6. Note Taking* **Media:**	**Subject:** **7.** Feed ingredients source of vitamins **8.** Mineral source feed ingredients **9.** Types of vitamin sources	Case Method 2: 10%

		types of mineral feed ingredients 9. Accuracy in explaining the benefits of mineral feed ingredients 10. Accuracy in explaining the sources of vitamin feed ingredients 11. Accuracy in explaining the types of vitamin feed sources 12. Accuracy in explaining the benefits of vitamin food sources		(SAP), Course Agreement, and Learning Materials. 6. Responding to the opening question ***Case Method 2:*** 4. Divide the groups evenly (the lecturer divides) 5. Create a nutrition paper on feed ingredients as a source of vitamins and minerals, maximum 15 pages from the table of contents to the bibliography, TMR font size 12, 1.5 spacing, sent in PDF format. 6. Group presentation **Mode (Learning Management System):** elearning@usu.ac.id	*3. Power Point Presentation* *4. Text Book* **Learning methods**: *4. Lecturer* *5. Discussion* *Self-Paced*	**10.** Types of mineral sources **11.** Benefits of vitamin sources **12.** Benefits of mineral sources	
8	MID THERM EXAMINATION						15%
9	**Sub-CLO 6:** After taking this course, students will be able to formulate additional feed in the form of	1. Accuracy in explaining non-nutritional feed 2. Accuracy in explaining the	**Criteria:** Assessment rubric. **Technique:** *Test:* *1. Case method*	KM+PT (1 week x 2 credits x 120 minutes) **Activity:** 1. Attendance absence 2. Download and read the Syllabus (RPS),	TM (1 week x 2 credits x 50 minutes) **Activity:** *1. Offline Learning* *2. Class Discussion* *3. Note Taking*	**Subject:** *1.* Definition of fedd additive *2.* Types of feed additives *3.* Benefits of feed additives	Case Method 3: 10%

	non-nutritional feed (feed additives).	types of feed additives 3. Accuracy in explaining the benefits of feed additives 4. Accuracy in explaining feed additive factors		Learning Implementation Plan (SAP), Course Agreement, and Learning Materials. 3. Responding to the opening question ***Case Method 3:*** 1. Divide the groups evenly (the lecturer divides) 2. Create a 15-page feed additive paper from the table of contents to the bibliography, TMR font size 12, 1.5 spacing, sent in PDF format. **Mode (Learning Management System):** elearning@usu.ac.id	**Media:** *1. Power Point Presentation* *2. Text Book* **Learning methods**: *1. Lecturer* 2. *Discussion* 3. *Self-Paced*	*4.* Feed additive factors	
10	**Sub-CLO 7:** After taking this course, students will be able to formulate supplementary feeds.	5. Accuracy in explaining feed supplement feed 6. Accuracy in explaining the type of feed supplement 7. Accuracy in explaining the benefits of feed supplements	**Criteria:** Assessment rubric. **Technique:** *Test:* *1. Case method*	KM+PT (1 week x 2 credits x 120 minutes) **Activity:** 4. Attendance absence 5. Download and read the Syllabus (RPS), Learning Implementation Plan (SAP), Course Agreement, and Learning Materials.	TM (1 week x 2 credits x 50 minutes) **Activity:** *4. Offline Learning* *5. Class Discussion* *6. Note Taking* **Media:** *3. Power Point Presentation* *4. Text Book*	**Subject:** *5.* Definition of feed supplement *6.* Types of supplement feed *7.* Benefits of feed supplements	5%

		8. Accuracy in explaining feed supplement factors		6. Responding to the opening question **Mode (Learning Management System):** elearning@usu.ac.id	**Learning methods**: *4. Lecturer* 5. *Discussion* *Self-Paced*	*8.* Feed supplement factors	
11-12	**Sub-CLO 8:** After taking this course, students will be able to formulate nutritional needs and feed ingredient requirements.	1. Accuracy in explainingnutritional needs 2. Accuracy in nutritional calculations 3. Accuracy in explaining feed ingredient requirements 4. Accuracy in feed ingredient requirement factors	**Criteria:** Assessment rubric. **Technique:** *Non-Test:*	KM+PT (2 week x 2 credits x 120 minutes) **Activity:** 1. Attendance absence 2. Download and read the Syllabus (RPS), Learning Implementation Plan (SAP), Course Agreement, and Learning Materials. 3. Responding to the opening question ***Case Method 4:*** 3. Divide the groups evenly (the lecturer divides) 4. Make a paper for each group regardingFeed requirements 15 pages from table of contents to bibliography TMR font size 12 spacing 1.5 sent in PDF format	TM (1 week x 2 credits x 50 minutes) **Activity:** *1. Offline Learning* *2. Class Discussion* *3. Note Taking* **Media:** *1. Power Point Presentation* *2. Text Book* **Learning methods**: *1. Lecturer* 2. *Discussion* 3. *Self-Paced*	**Subject:** *1.* Definition of nutritional needs *2.* nutritional calculations *3.* nutritional requirements *4.* feed ingredient requirement factors	Case Method 4: 10%

				Mode (Learning Management System): elearning@usu.ac.id			
13-14	**Sub-CLO 9**: After taking this course, students will be able to formulate rations for various types of livestock.	1. Accuracy in making poultry ration formulations 2. Accuracy in making ruminant ration formulations	**Criteria:** Assessment rubric. **Technique:** *Test:* 1. *Case method*	KM+PT (2 week x 2 credits x 120 minutes) **Activity:** 1. Attendance absence 2. Download and read the Syllabus (RPS), Learning Implementation Plan (SAP), Course Agreement, and Learning Materials. 3. Responding to the opening question ***Case Method 5:*** 1. Divide the groups evenly (the lecturer divides) 2. Create a 15-page ration formulation paper from the table of contents to the bibliography, TMR font size 12, 1.5 spacing, sent in PDF format. **Mode (Learning Management System):** elearning@usu.ac.id	TM (1 week x 2 credits x 50 minutes) **Activity:** *1. Offline Learning* *2. Class Discussion* *3. Note Taking* **Media:** *1. Power Point Presentation* *2. Text Book* **Learning methods**: *1. Lecturer* *2. Discussion* *3. Self-Paced*	**Subject:** *1.* Making poultry ration formulas *2.* Making ruminant ration formulations	Case Method 5: 10%

15	**Sub-CLO 4:** After taking this course, students will be able to formulate physical, chemical and biological evaluations of ration quality.	1. Accuracy in explainingdefinitio n of evaluation 2. accuracy in describing the quality of rations 3. accuracy in the physical quality of rations 4. accuracy in chemical quality of rasnum 5. accuracy in the biological quality of rations	**Criteria:** Assessment rubric. **Technique:** *Test:* *1. Quiz*	KM+PT (2 week x 2 credits x 120 minutes) **Activity:** 4. Attendance absence 5. Download and read the Syllabus (RPS), Learning Implementation Plan (SAP), Course Agreement, and Learning Materials. 6. Responding to the opening question ***Quiz 2:*** *Quiz to measure students' understanding of protein as a nutrient needed by poultry* **Mode (Learning Management System):** elearning@usu.ac.id	TM (1 week x 2 credits x 50 minutes) **Activity:** *4. Offline Learning* *5. Class Discussion* *6. Note Taking* **Media:** *3. Power Point Presentation* *4. Text Book* **Learning methods**: *4. Lecturer* *5. Discussion* *Self-Paced*	**Subject:** 1. Evaluation of ration quality 2. physical quality evaluation 3. chemical quality evaluation 4. biological quality evaluation	Quiz 2: 5%
16	FINAL EXAMINATION						15%

Assessment Design:

CLO Code and Percentage	Sub-CLO Code	Evaluation Form	Percentage (%)	Total	Implementation of Evaluation
CLO0304 (15%)	Sub-CLO1	Mid Therm Exam	6	15%	Week 8

	Sub-CLO9	Final Exam	6		Week 16
	Sub-CLO10	Quis	3		Week 15
CLO0602 (50%)	Sub-CLO1	Mid Therm Exam	5.5	50%	Week 8
	Sub-CLO2	Mid Therm Exam	5.5		Week 8
	Sub-CLO3	Case Method	5		Week 3
	Sub-CLO4	Quis	5		Week 4
	Sub-CLO5	Case Method	5		Week 6
	Sub-CLO6	Case Method	5		Week 9
	Sub-CLO7	Final Exam	6		Week 10
	Sub-CLO8	Case Method	5		Week 12
	Sub-CLO9	Case Method	5		Week 13
	Sub-CLO10	Quis	3		Week 15
CLO0902 (25%)	Sub-CLO3	Case method	5	25%	Week 3
	Sub-CLO6	Case method	5		Week 9
	Sub-CLO7	Final Exam	5		Week 10
	Sub-CLO8	Case method	5		Week 11
	Sub-CLO9	Case Method	5		Week 13

CLO1102 (10%)	Sub-CLO9	Case methode	5	10%	Week14
	Sub-CLO10	Quis	5		Week15
Total			100%	100%	

Assessment Plan:

Evaluation Form	Sub-CLO	Assessment Instrument [Frequency]		Invoice (proof)	Assessment Credit (%)
		Formative	**Summative**		
Quiz/Q&A	Sub-CLO3 and Sub-CLO8	Assessment rubric [2 times]	-	Quiz answers uploaded to kelas.usu.ac.id	10
Case Methode	Sub-CLO4 and Sub-CLO9	Feedback results case analysis [5 times]	Assessment rubric [2 times]	Logbook/worksheet/slides uploaded to kelas.usu.ac.id	50
Written exam 1 (UTS)	Sub-CLO1, Sub-CLO2, Sub-CLO3, Sub-CLO4, Sub-CLO5, Sub-CLO6 and Sub-CLO7	-	Assessment rubric [1 time]	Written exam result sheet	20
Written exam 2 (UAS)	Sub-CLO8, Sub-CLO9, Sub-CLO10, Sub-CLO11, Sub-CLO12, Sub-CLO13 and Sub-CLO14	-	Assessment rubric [1 time]	Written exam result sheet	20
Total					**100%**

Explanation:

a) Quiz 10%

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

b) *Case Method*50%
During the semester there will be a case method, each student will make a paper and report from each case method in groups. The case method in this course is done 5 times. The paper that has 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 are presenting.

c) 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.

d) Final Exam 20%
The final semester exam covers all the material that has been discussed since the 9th to 15th meeting, both reading and lecture. This exam is conducted in class in the form of 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 4 times during 1 semester)

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

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

Minimum score = 25 (5 questions x 5 points)

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

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

Total score if you take all post-test quizzes with a perfect score is 200 x 10%[quiz percentage] = 20

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

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

Information :

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

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

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 word choices that interfere with understanding.	Uses foreign/Indonesian language quite well and correctly with some grammatical errors and word choices	Does not use foreign/Indonesian language properly and correctly because the writing contains many

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

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.