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

**Docume Code** (Follow)

## SEMESTER LEARNING PLAN (SLP)

| COURSE | CODE | COURSE GROUP | CREDIT | SEMESTER | Date of Compilat |
|---|---|---|---|---|---|
| Milk and Egg Technology | PTN3230 | Exact | 3 credits | VI (Six) | October 2024 |

| AUTHORIZATION / APPROVAL | SLP Developer Lecturer | Vice Dean I | Chairman of LINK-UP US |
|---|---|---|---|
| | | Dr. Lisnawita, SP, MP | Prof. Dr. Dwi Suryanto M.S |

| Learning Outcomes | Learning Outcome (LO) | |
|---|---|---|
| | 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 lea independently |
| | LO07 | Able to disseminate knowledge and application of the latest TALENT-based technology in the field of an husbandry |
| | LO08 | Able to manage integrated and sustainable livestock farming based on integration with other agro-ecosystems as w the 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 pra relevant to livestock expertise. |
| | LO13 | Understanding the concept of identification, security with a multidisciplinary approach in the field of animal husba science |
| | **Course Learning Outcomes (CLO)** | **CLO Credit** |

| | | |
|---|---|---|
| | CLO0335: Able to explain solutions to problems in the application of technology in milk and egg processing. | 9.76% |
| | CLO0630: Able to evaluate the application of technology in milk and egg processing | 9.76% |
| | CLO0706: Able to apply technology in the process of processing milk and eggs | 4.76% |
| | CLO0818: Able to make processed milk and egg products based on agricultural and plantation products | 26.36% |
| | CLO1130: Able to make processed egg and milk products by applying the latest techniques and technology. | 21.36% |
| | CLO1321: Able to apply milk and egg product processing technology in a monodisciplinary and/or interdisciplinary scope. | 27.79% |

| | **Final Ability of Each Learning Stage (Sub-CLO)** |
|---|---|
| Sub-CLO 1 | After taking this lecture, students will be able to explain the characteristics of milk and eggs. |
| Sub-CLO 2 | After taking this course, students will be able to explain the basic principles of milk and egg processing. |
| Sub-CLO 3 | After taking this lecture, students will be able to explain milk and egg processing techniques. |
| Sub-CLO 4 | After taking this course, students will be able to explain dairy products (cheese, yoghurt, kefir) and eggs (mayonna salted eggs). |
| Sub-CLO 5 | After taking this course, students will be able to explain physicochemical and functional properties of milk and egg |

<table>
<tr><td></td><td>Sub-CLO 6</td><td>After taking this lecture, students will be able to explain the processing of milk and eggs into functional foods by utilizing bioactive components of herbal plants.</td></tr>
<tr><td></td><td>Sub-CLO 7</td><td>After taking this course, students will be able to explain the quality evaluation of milk and egg products.</td></tr>
<tr><td>Correlation of CLO with Sub-CLO</td><td colspan="2">
<table>
<tr><th></th><th>Sub-CLO1</th><th>Sub-CLO2</th><th>Sub-CLO3</th><th>Sub-CLO4</th><th>Sub-CLO5</th><th>Sub-CLO6</th><th>Sub-CLO7</th></tr>
<tr><td>CLO0335</td><td>√</td><td></td><td></td><td></td><td>√</td><td></td><td>√</td></tr>
<tr><td>CLO0630</td><td></td><td>√</td><td>√</td><td></td><td></td><td></td><td>√</td></tr>
<tr><td>CLO0706</td><td></td><td>√</td><td>√</td><td></td><td></td><td></td><td></td></tr>
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<tr><td>CLO1130</td><td></td><td>√</td><td>√</td><td>√</td><td></td><td></td><td></td></tr>
<tr><td>CLO1321</td><td></td><td>√</td><td>√</td><td>√</td><td>√</td><td>√</td><td></td></tr>
</table>
</td></tr>
<tr><td>Brief Description of Course</td><td colspan="2">After completing the Milk and Egg Technology course, sixth semester students of the Animal Husbandry Study Program, Facul Agriculture, University of North Sumatra are expected to be able to explain the scope of technology utilization to produce proc milk and egg products.This course is conducted using Indonesian as the language of instruction with 14 face-to-face mee consisting of material presentations, discussions, presentations, online/offline practicums, quizzes and assignments.</td></tr>
<tr><td>Study Material:<br><br>Learning materials</td><td colspan="2">BK03 Animal Production Science<br>BK07 Application and Development of Animal Science and Technology<br><br>1. Characteristics of milk and eggs</td></tr>
</table>

| | |
|---|---|
| | 2. Basic principles of milk and egg processing<br>3. Milk and egg processing techniques<br>4. Dairy products (cheese, yoghurt, kefir) and eggs (mayonnaise, salted eggs, egg nog)<br>5. Physico-chemical and functional properties of milk and eggs<br>6. Processing of milk and eggs into functional foods by utilizing bioactive components of herbal plants<br>7. Evaluation of the quality of milk and egg products |
| **Library** | **Main**<br>1. Chandan, RC and A. Kilara. 2011. Dairy Ingredients for Food Processing. Blackwell Publishing: USA<br>2. Hanum, Z., Yurliasni and Dzarnisa. 2021. Milk Processing Technology. Syiah Kuala University Press: Aceh<br>3. Immerseel, F.V., Y. Nys and M. Bain. 2011. Improving the Safety and Quality of Eggs and Egg Products. Woodhead Publis<br>New Delhi<br>4. Manab, A., PP Rahayu, ME Sawitri, MW Apriliyani, RD Andriani and KU Al-Awwaly. 2021. Milk Science. UB Press: Ma<br>5. Nurliyani, Widodo, E. Wahyuni and S. Rakhmatulloh. 2023. Egg Science and Technology. UGM Press: Yogyakarta<br>6. Purnasari, N., IH Rusdan and M. Taufik. 2021. Milk Processing Technology. Guepedia: Sukoharjo<br>7. Purwadi, LE Radiati, H. Evanuarini and RD Andriani. 2017. Handling of Livestock Products. UB Press: Malang<br>8. Purwadi. 2019. Cheese Science and Technology. UB Press: Malang<br>9. Stadelman, WJ and OJ Cotterill. 1995. Egg Science and Technology Fourth Edition. The Haworth Press: New York<br>10. Thohari, I. 2018. Egg Preservation and Processing Technology. UB Press: Malang<br>11. Thohari, I., Mustakim, M. Padaga and PP Rahayu. 2017. Livestock Product Technology. UB Press: Malang<br>12. Thohari. 2018. Egg Preservation and Processing Technology. UB Press: Malang |
| | **Supporters**<br>1. Milk and Dairy Products Technology. 2017<br>2. Egg Innovations and Strategies for Improvements. 2017<br>3. Practical Guide Book<br>4. Scientific Articles<br>5. International and national journals |
| **Supporting lecturer** | |

| Required Courses | - |
|---|---|

| Meeting | Final ability of each learning stage (Sub-CLO) | Evaluation | | Form of Learning; Learning methods; Student Assignments; [ Estimated Time ] | | Study Materials (Learning materials) | Assessment Cr (%) |
|---|---|---|---|---|---|---|---|
| | | Indicator | Criteria and Techniques | | | | |
| (1) | (2) | (3) | (4) | Asynchronous (5) | Synchronous (6) | (7) | (8) |
| 1 | **Sub-CLO 1:**<br>After taking this course, students will be able to explain characteristics of milk and eggs | a. Accuracy in explainingmilk characteristics<br>b. Accuracy in explainingegg characteristics | **Criteria:**<br>Using assessment rubrics<br><br>**Technique:**<br>*Non-test* | KM+PT (1 week x 3 credits x 120 minutes)<br><br>**Learning methods:**<br>*Self-Paced Learning*<br><br>**Activity:**<br>a. Attendance presence<br>b. Introduction<br>c. Download and read the Syllabus (RPS), Learning Implementatio | TM (1 week x 2 credits x 50 minutes)<br><br>**Learning methods:**<br>*a. Lecture*<br>*b. Discussion*<br><br>**Activity:**<br>*a. Online/offline learning*<br>*b. Class discussion*<br>c. Make notes about learning materials | **Subject:**<br>a. Characteristics of milk<br>b. Characteristics of eggs | *Diasses*accordi student attenda and activity |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | | n Plan (SAP), Course Agreement, and Learning Materials<br><br>**Mode (Learning Management System):**<br>class.usu.ac.id | **Media:**<br>a. Slides/ ppt<br>b. Zoom meeting/ LCD<br>c. Text book | | |
| 2 | **Sub-CLO 2:**<br>After taking this course, students will be able to explain basic principles of milk and egg processing | Accuracy in explainingbasic principles of milk and egg processing | **Criteria:**<br>Using assessmen t rubrics<br><br>**Techniqu e:**<br>*Non-test* | KM+PT (1 week x 3 credits x 120 minutes)<br><br>**Learning methods:**<br>*Self-Paced Learning*<br><br>**Activity:**<br>a. Attendance presence<br>b. Reviewing the meeting material for week 1<br>c. Introduction<br><br>**Mode (Learning Management *System*):** | TM (1 week x 2 credits x 50 minutes)<br><br>**Learning methods:**<br>*a. Lecture*<br>*b. Discussion*<br><br>**Activity:**<br>*a. Online/offlin e learning*<br>*b. Class discussion*<br>c. Make notes about learning materials<br><br>**Media:**<br>a. Slides/ ppt | **Subject:**<br>a. Basic principles of milk processing:<br>- Collection<br>- Cooling<br>- Heating (pasteurization, sterilization)<br>- Homogenization<br>- Further processing<br><br>b. Basic principles of egg processing | *Diasses*accordi student attenda and activity |

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|---|---|---|---|---|---|---|---|
| | | | | class.usu.ac.id | b. Zoom meeting/ LCD<br>c. Text book | | |
| 3 & 4 | **Sub-CLO 3:**<br>After taking this course, students will be able to explain milk and egg processing techniques | a. Accuracy in explainingmilk processing techniques<br>b. Accuracy in explaining egg processing techniques | **Criteria:**<br>Using assessment rubrics<br><br>**Technique:**<br>*Test: Quiz* | KM+PT (1 week x 3 credits x 120 minutes)<br><br>**Learning methods:**<br>*Self-Paced Learning*<br><br>**Activity:**<br>a. Attendance presence<br>b. Reviewing the materials for the 2nd week meeting<br>c. Introduction<br>d. Quiz<br><br>**Quiz 1 :**<br>Quiz to measure students' understanding in meetings week 1-3<br><br>**Mode (Learning Management** | TM (1 week x 2 credits x 50 minutes)<br><br>**Learning methods:**<br>*a. Lecture*<br>*b. Discussion*<br><br>**Activity:**<br>*a. Online/offline learning*<br>*b. Class discussion*<br>c. Make notes about learning materials<br><br>**Media:**<br>a. Slides/ ppt<br>b. Zoom meeting/ LCD<br>c. Text book | **Subject:**<br>a. Milk processing techniques<br>b. Egg processing techniques | *Diasses*accordi<br>student attenda<br>and activity<br><br>Quiz 1: 10% |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | | ***System*):** class.usu.ac.id<br><br>**Mode (Learning Management *System*):** class.usu.ac.id | | | |
| 5, 6 and 7 | **Sub-CLO 4:**<br>After taking this course, students will be able to explain dairy products (cheese, yoghurt, kefir) and eggs (mayonnaise, salted eggs, egg nog) | a. Accuracy inexplaining dairy products (cheese, yoghurt, kefir)<br>b. Accuracy in explaining egg products (mayonnaise, salted eggs, egg nog) | **Critehappy:** RAssessment section<br><br>**Ttechnique:** *Test: Assignment* | KM+PT (1 week x 3 credits x 120 minutes)<br><br>**Learning methods:** *Self-Paced Learning*<br><br>**Activity:**<br>a. Attendance presence<br>b. Reviewing the meeting materials for weeks 3, 4, 5, 6 and 7<br>c. Introduction<br>d. Task<br><br>**Task 1:**<br>a. Divide the groups evenly (the lecturer divides) | TM (1 week x 2 credits x 50 minutes)<br><br>**Learning methods:**<br>*a. Lecture*<br>*b. Discussion*<br><br>**Activity:**<br>*a. Online/offline learning*<br>*b. Class discussion*<br>c. Make notes about learning materials<br>d. Presentation<br><br>**Media:**<br>a. Slides/ ppt<br>b. Zoom meeting/ LCD | **Subject:**<br>a. Cheese products<br>b. Yogurt products<br>c. Kefir products<br>d. Mayonnaise products<br>e. Salted egg products<br>f. Egg nog products | *Diasses*accordi student attenda and activity<br><br>Task 1: 10% |

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|---|---|---|---|---|---|---|---|
| | | | | b. Create a paper with TNR font size 12, 1.5 spacing, sent in PDF format<br><br>Group presentation<br>**Mode (Learning Management *System*):**<br>class.usu.ac.id | c. Text book | | |
| **8** | **MID-SEMESTER EXAM (MID TERM EXAM)** | | | | | | **20%** |
| 9, 10 and 11 | **Sub-CLO 4:**<br><br>**Advanced**<br><br>After taking this course, students will be able to explain dairy products (cheese, yoghurt, kefir) and eggs (mayonnaise, salted eggs, egg nog) | a. Accuracy inexplaining dairy products (cheese, yoghurt, kefir)<br>b. Accuracy in explaining egg products (mayonnaise, salted eggs, egg nog) | **Critehappy:**<br>RAssessment section<br><br>**Ttechnique:**<br>*Test: Assignment* | KM+PT (1 week x 3 credits x 120 minutes)<br><br>**Learning methods:**<br>*Self-Paced Learning*<br><br>**Activity:**<br>a. Attendance presence<br>b. Review meeting materials before mid-term exam and mid-term | TM (1 week x 2 credits x 50 minutes)<br><br>**Learning methods:**<br>*a. Lecture*<br>*b. Discussion*<br><br>**Activity:**<br>*a. Online/offline learning*<br>*b. Class discussion*<br>*c.* Make notes about learning materials | **Subject:**<br>a. Cheese products<br>b. Yogurt products<br>c. Kefir products<br>d. Mayonnaise products<br>e. Salted egg products<br>f. Egg nog products | *Diasses*accordi student attenda and activity<br><br>Task 1: 10% |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | | exam evaluation<br>c. Introduction<br>d. Task<br><br>**Task 1:**<br>a. Divide the groups evenly (the lecturer divides)<br>b. Create a paper with TNR font size 12, 1.5 spacing, sent in PDF format<br>c. Group presentation<br><br>**Mode (Learning Management *System*):**<br>class.usu.ac.id | *d.* Presentation<br><br>**Media:**<br>a. Slides/ ppt<br>b. Zoom meeting/ LCD<br>c. Text book | |
| 12 & 13 | **Sub-CLO 5 :**<br>After taking this lecture, students will be able to explain the physico-chemical | a. Accuracy in explainingphysicochemical properties of milk and eggs<br>b. Accuracy in explaining the | **Criteria:** Using assessment rubrics<br><br>**Technique:** | KM+PT (1 week x 3 credits x 120 minutes)<br><br>**Learning methods:** | TM (1 week x 2 credits x 50 minutes)<br><br>**Learning methods:**<br>*a. Lecture* | **Subject:**<br>a. Understanding physical-chemical propertiesand functional<br>b. Physico-chemical properties | |

*Diasses*accordi
student attenda
and activity

Quiz 2: 10%

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | and functional properties of milk and eggs. | functional properties of milk and eggs | *Test: Quiz* | *Self-Paced Learning*<br><br>**Activity:**<br>a. Attendance presence<br>b. Review meeting materials before mid-term exam and mid-term exam evaluation<br>c. Introduction<br>d. Quiz<br><br>**Quiz 2 :**<br>Quiz to measure student understanding after mid-term exam evaluation<br><br>**Mode (Learning Management *System*):**<br>class.usu.ac.id | *b. Discussion*<br><br>**Activity:**<br>*a. Online/offline learning*<br>*b. Class discussion*<br>c. Make notes about learning materials<br>d. Presentation<br><br>**Media:**<br>a. Slides/ ppt<br>b. Zoom meeting/ LCD<br>c. Text book<br>a. | (organoleptic, viscosity, nutritional components)<br>c. Functional properties (primary function: source of nutrients, secondary function (sensory properties) and tertiary function (increasing body resistance and health) | |
| 14 | **Sub-CLO 6:** | Accuracy in explaining the processing of | **Criteria:** | KM+PT (2 weeks x 3 credits x 120 minutes) | TM (2 weeks x 2 credits x 50 minutes) | **Subject:**<br>Processing of milk and eggs into functional | *Diasses*accordi student attenda and activity |

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|---|---|---|---|---|---|---|
| | After taking this course, students will be able to explain Processing milk and eggs into functional foods by utilizing bioactive components of herbal plants | milk and eggs into functional foods by utilizing bioactive components of herbal plants | Using assessment rubrics<br><br>**Technique:**<br>*Non-test* | **Learning methods:**<br>*Self-Paced Learning*<br><br>**Activity:**<br>a. Attendance presence<br>b. Reviewing the materials for the 13th week meeting<br>c. Introduction<br>d. Task<br><br>**Task 2:**<br>a. Divide the groups evenly (the lecturer divides)<br>b. Create a paper with TNR font size 12, 1.5 spacing, sent in PDF format | **Learning methods:**<br>*a. Lecture*<br>*b. Discussion*<br><br>**Activity:**<br>*a. Online/offline learning*<br>*b. Class discussion*<br>c. Make notes about learning materials<br>d. Presentation<br><br>**Media:**<br>a. Slides/ ppt<br>b. Zoom meeting/ LCD<br>c. Text book | foods by utilizing bioactive components of herbal plants |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | | c. Group presentation<br><br>**Mode (Learning Management *System*):**<br>class.usu.ac.id | | | |
| 15 | **Sub-CLO 7:**<br><br>After taking this course, students will be able to explain evaluation of the quality of milk and egg products | Accuracy in explainingevaluation of the quality of milk and egg products | **Critehappy:**<br>RAssessment section<br><br>**Ttechnique:**<br>*Non-test* | KM+PT (1 week x 3 credits x 120 minutes)<br><br>**Learning methods:**<br>*Self-Paced Learning*<br><br>**Activity:**<br>a. Attendance presence<br>b. Reviewing the materials for the week-14 meeting<br>c. Introduction<br><br>**Mode (Learning Management *System*):**<br>class.usu.ac.id | TM (1 week x 2 credits x 50 minutes)<br><br>**Learning methods:**<br>*a. Lecture*<br>*b. Discussion*<br><br>**Activity:**<br>*a. Online/offline learning*<br>*b. Class discussion*<br>*c.* Make notes about learning materials<br><br>**Media:**<br>a. Slides/ ppt<br>b. Zoom meeting/ LCD<br>c. Text book | **Subject:**<br>Evaluation of the quality of milk and egg products | *Diasses*accordi<br>student attenda<br>and activity |
| **16** | **FINAL SEMESTER EXAM (FINAL EXAM)** | | | | | | **20%** |

**Assessment Design:**

| CLO Code and Percentage | Sub-CLO Code | Evaluation Form | Percentage (%) | Total | Implementation of Evaluation |
|---|---|---|---|---|---|
| **CLO0335 (9.76%)** | Sub-CLO1 | MID TERM EXAM | 3.33 | 9.76 | Week 8 |
| | Sub-CLO5 | Quiz | 1.43 | | Week 13 |
| | Sub-CLO7 | FINAL EXAM | 5 | | Week 15 |
| **CLO0630 (9.76%)** | Sub-CLO2 | MID TERM EXAM | 3.33 | 9.76 | Week 8 |
| | Sub-CLO3 | Quiz | 1.43 | | Week 3 |
| | Sub-CLO7 | FINAL EXAM | 5 | | Week 15 |
| **CLO0706 (4.76%)** | Sub-CLO2 | MID TERM EXAM | 3.33 | 4.76 | Week 8 |
| | Sub-CLO3 | Quiz | 1.43 | | Week 3 |
| **CLO0818 (26.36%)** | Sub-CLO2 | MID TERM EXAM | 3.33 | 26.36 | Week 8 |
| | Sub-CLO4 | Project Based Learning | 16.6 | | Week 11 |
| | Sub-CLO5 | Quiz | 1.43 | | Week 13 |
| | Sub-CLO6 | FINAL EXAM | 5 | | Week 15 |
| **CLO1130 (21.36%)** | Sub-CLO2 | MID TERM EXAM | 3.33 | 21.36 | Week 8 |
| | Sub-CLO3 | Quiz | 1.43 | | Week 3 |
| | Sub-CLO4 | Project Based Learning | 16.6 | | Week 11 |

| | | | | | |
|---|---|---|---|---|---|
| **CLO1321 (27.79%)** | Sub-CLO2 | MID TERM EXAM | 3.33 | 27.79 | Week 8 |
| | Sub-CLO3 | Quiz | 1.43 | | Week 3 |
| | Sub-CLO4 | Project Based Learning | 16.6 | | Week 11 |
| | Sub-CLO5 | Quiz | 1.43 | | Week 13 |
| | Sub-CLO6 | FINAL EXAM | 5 | | Week 15 |
| 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-CLO5 | Assessment rubric [3 times] | - | Quiz answers uploaded to kelas.usu.ac.id | 5 |
| **Assignment** | Sub-CLO5 | Assessment rubric [2 times] | - | Assignment answers uploaded to kelas.usu.ac.id | 5 |
| **Project Based Learning** | Sub-CLO2 and Sub-CLO4 | Feedback results case analysis [3 times] | Assessment rubric [3 times] | Logbook/worksheet/slides uploaded to kelas.usu.ac.id | 30 |
| **Case Method** | Sub-CLO2 and Sub-CLO4 | Feedback results case analysis [2 times] | Assessment rubric [2 times] | Logbook/worksheet/slides uploaded to kelas.usu.ac.id | 20 |
| **Written exam 1 (MID TERM EXAM)** | Sub-CLO1, Sub-CLO2, Sub-CLO3and Sub-CLO4 | - | Assessment rubric [1 time] | Written exam result sheet | 20 |
| **Written exam 2 (FINAL EXAM)** | Sub-CLO4, Sub-CLO5 and Sub-CLO6 | - | Assessment rubric [1 time] | Written exam result sheet | 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 RPS.

b) Assignment 5%
   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.

**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)$20 \times \sum nilai\ per\ butir\ soal$

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

**Group Presentation Assignment Assessment Rubric (10%)**

| **Matter** | **Evaluation criteria** | | | | |
|---|---|---|---|---|---|
| Contents | Complete, with great additional material<br>(20) | Complete<br>(18) | Same as text book<br>(16) | Not complete, but most of the material is covered.<br>(14) | Substantially incomplete<br>(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 do not reach the target and there are 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) | Creativity creates enthusiasm (18) | Sometimes it attracts attention (15) | Sometimes it 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.

**Essay Exam Assessment Rubric:**

| **Assessment criteria** | **4**<br>**Very good** | **3**<br>**Good** | **2**<br>**Enough** | **1**<br>**Not enough** |
|---|---|---|---|---|
| **Understanding the Questions** | Understand the question exactly once<br>(25) | Understanding the questions<br>(20) | Not understanding the question fully and correctly<br>(15) | Don't understand the question<br>(10) |
| **Contents** | Answers show understanding<br>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<br>(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.<br>(20) | The answer shows a lack of understanding of the material being asked and only integrates<br>a small portion of information that has been studied and/or assigned to be read during lectures.<br>(15) | The answer shows a lack of understanding of the material being asked so it is unclear and not integrated.<br>information that has been studied and/or assigned to be read during lectures.<br>(10) |

| | | | | |
|---|---|---|---|---|
| **Clarity of Writing** | All written ideas are conveyed well and clearly.<br>(25) | Most of the ideas in the writing are well and clearly conveyed.<br>(20) | Some of the ideas in the writing are conveyed well and clearly.<br>(15) | The ideas in the writing are not conveyed well and clearly.<br>(10) |
| **Clarity of Language** | Uses foreign/Indonesian languages well and correctly with minimal grammatical errors and word choices that do not interfere with understanding<br>(25) | Uses foreign/Indonesian languages well and correctly with minimal grammatical errors and word choices that interfere with understanding.<br>(20) | Uses foreign/Indonesian language quite well and correctly with some grammatical errors and word choices<br>(15) | Does not use foreign/Indonesian language properly and correctly because the writing contains many grammatical errors and word choices<br>(10) |
| **Total** | **81-100**<br>**(Very well)** | **61-80**<br>**(Pretty good)** | **41-60**<br>**(Enough)** | **0-40**<br>**(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. |