COURSE LEARNING PLAN

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| | UNIVERSITY OF BRAWIJAYA<br>FACULTY OF ANIMAL SCIENCE<br>DEPARTMENT OF ANIMAL SCIENCE<br>UNDERGRADUATE STUDY PROGRAM OF ANIMAL SCIENCE<br>LEARNING PLAN: MEAT PRODUCTION |

| Course | Code | Weight (credits) | Semester | Compilation Date |
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| Meat Production | PEP61002 | 3 (2-1) SKS | EVEN | July 27, 2020 |
| Authorization | Course Coordinator | | Head of Undergraduate Study Program of Animal Science | Vice Dean 1 |
| | Dr. Ir. Kuswati, MS, IPM, ASEAN Eng<br>Dr. Ir. Moch Nasich, MS<br>Dr.Ir Hary Nugroho, MS<br>Wike Andre Septian, S.Pt,M.Si<br>Irida Novianti, S.Pt, M.Agr.Sc | | Dr. Ir. Herly Evanuraini, MP | Dr. Ir. Halim Natsir, S.Pt, IPM, ASEAN Eng |

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| Learning Outcomes (LO) | PLO |
| | 1. LO3 Demonstrate attitudes of friendly and caring about animal welfare and permissible (halal) consumption<br>2. LO4 Able to develop comprehensive insight and mindset according to the science and field of the animal industry<br>3. LO6 Able to apply biological science, physiology, nutrition science, breeding science, animal raising management to comprehend the concept and implement it in the field of animal science<br>4. LO7 Able to demonstrate independent, quality, and measurable performance (both quality and quantity) effectively, efficiently, and sustainably |
| | CLO |
| | 1. Able to explain, describe, and predict the potential population and demand for beef cattle (LO4, LO6).<br>2. Able to identify and mention breeds of cattle and the potential of each breed. (LO4 and LO6)<br>3. Able to explain the period of animal growth, factors that affect animal growth, as well as beef cattle growth engineering (LO6). |

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| | 4. Able to demonstrate the ability to measure vital statistics and BCS, predict body weight and visually compare body parts of cattle and be able to compare ideal and non-ideal animals, and evaluate carcass production and quality. (LO4, CP7)<br>5. Able to create technical workflow (SOP) for routine maintenance (deworming, creepfeeding, animal identification, dehorning, castration), animal transportation, and cattle slaughter. (LO6, LO7)<br>6. Able to design stables and provide examples of the application of animal welfare in animal transportation, raising and slaughtering animals (LO3, LO7) | |
| Brief Course Description | The course discusses the role of beef cattle in providing meat for the community; government policies in beef cattle farming; various breeds of beef cattle developed for meat production; growth and development of beef cattle and the factors that influence them. Visual animal assessment and measurement of body condition score related to management and judging, and evaluation of carcass production and quality. Routine maintenance techniques and design of pens and transportation equipment is in accordance with animal welfare principles. | |
| Topic/Sub-Course/Subject | 1. Introduction, introduction to the beef cattle industry and the dynamics of the development of beef cattle<br>2. Breeds of large, small, and pig ruminant animals<br>3. Growth and Development of Beef Cattle<br>4. Housing<br>5. Visual Animal Assessment (Judging and BCS)<br>6. Technical Routine Maintenance<br>7. Animal Welfare<br>8. Beef Cattle Transportation<br>9. Slaughterhouses and Slaughterhouses<br>10. Evaluation of Carcass Production and Meat Quality | |
| Reference | | |
| Learning media | Software | Hardware |
| | 1. PowerPoint<br>2. Google Class Room<br>3. Video<br>4. Equizi<br>5. Zoom | 1. Whiteboard<br>2. Computer<br>3. LCD |
| Teaching Team | 1. Dr. Ir. Kuswati, MS, IPM, ASEAN Eng | |

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| | | 2. Dr. Ir. Moch Nasich, MS<br>3. Irida Novianti, S.Pt, M.Agr.Sc<br>4. Wike Andre Septian, S.Pt, M.Si | | | | |
| Prerequisite Courses | | 1. Biology<br>2. Animal Anatomy and Physiology | | | | |
| Week | Sub-Course Learning Outcome | Indicator | Learning Materials / Topics | Learning Methods | Criteria & Form of Assessment | Weighted Score (%) |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| 1 | Able to know the scope of the course and the relation with other courses and explain the potential of the beef cattle industry and predict the demand for meat from beef cattle | - Show and explain accurate data sources on the potential of the beef cattle industry<br>- Show the ability to analyze demand and supply in the beef cattle industry<br>- Show ability in analyzing the development of the beef cattle population in Indonesia.<br>- Show an understanding of determining the consumption needs of beef cattle products in Indonesia. | - Introduction<br>- Lecture contract<br>- Dynamics of Beef Cattle Industry in Indonesia | Lectures, Discussions, and Assignments | - Criteria: Able show and explain with accurate analysis<br>- Assessment: Individual Assignment and Midterm Exam | |
| 2 | Able to show and explain the characteristics | - Showing the ability to identify the types | - Breed of Large Slaughter Cattle: Cows and Buffalo | Lectures, Discussions, | - Criteria: Able to show and explain with | |

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| | of animals and the potential of various breeds of large beef cattle (Large Ruminants) | of large beef cattle breeds<br>- Showing the ability to identify the potential of each large beef cattle breed | (Andre) | and Practicum | accurate analysis<br>- Assessment: Practicum (Final Practicum Exam) and Midterm Exam | |
| 3 | Able to show and explain the characteristics of animals and the potential of various breeds of small cattle (Small Ruminants and Pigs) | - Showing the ability to identify the types of small beef cattle breeds<br>- Showing the ability to identify the potential of each breed of small beef cattle | Breeds of Slaughtered Cattle: Small Ruminants (Goats & Sheep), Pigs (Pak Nasich) | Lectures, Discussions, and Practicum | - Criteria: Able to show and explain with accurate analysis<br>- Assessment: Practicum (Final Practicum Exam) and Midterm Exam | |
| 4 | Able to understand and explain growth theory, beef cattle development and growth engineering | - Showing an understanding of the basic theory of beef cattle growth<br>- Showing the ability to analyze the factors that affect growth | Growth and development of beef cattle<br>- Growth theory<br>- Growth curve<br>- Factors affecting growth<br>- Hormones that affect growth<br>- Examples of genes and hormones that affect growth<br>(Irida) | Lectures, Discussions, and Assignments | - Criteria: Able to show and explain with accurate analysis<br>- Assessment: Midterm Exam | |

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| 5 | Able to understand and explain growth theory, beef cattle development and growth engineering | - Showing an understanding of the application of growth theory (weight growth, compensatory growth) in beef cattle production systems | - Growth and second development (growth engineering and compensatory growth)<br>(Irida) | Lectures, Discussions, and Assignments | - Criteria: Able to show and explain with accurate analysis<br>- Assessment: assignment and Midterm Exam | |
| 6 | Able to explain the functions, types, conditions of establishment and be able to design beef cattle pens | - Showing basic skills in determining the ideal housing location<br>- Showing an understanding of the structure of the pen in accordance with the beef cattle to be kept and the production system<br>- Showing the ability in designing beef cattle pens | The set of Cow pens:<br>- Determination of pens location<br>- Pens layout<br>- Cow pens designs with various materials and quantities in intensive, semi-intensive (peddock and extensive) maintenance systems<br>- Construction of feed, drinking and waste disposal sites<br>(Andre) | Lectures, Discussions, and Assignments | - Criteria: Able to show and explain with accurate analysis<br>- Assessment: assignment and Midterm Exam | |
| 7 | Able to assess body condition score/BCS and beef cattle judging | - Showing the ability to assess Body condition score<br>- Showing the ability in conducting animal | Skills:<br>- Judging<br>- BCS<br>- Vital statistics<br>Assessment of various beef cattle: | Lectures, Discussions, and Practicum | - Criteria: Able to show and explain with accurate analysis<br>- Assessment: practicum | |

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| | | assessments (judging) | - Benefits of assessment on beef cattle production<br>- Guidelines and assessment system based on BCS for various beef cattle<br>- Guidelines and scoring system based on judging of various animals<br>(Pak Hary Nugroho) | | and Midterm Exam | |
| 8 | MIDTERM EXAM | | | | | |
| 9 | Able to demonstrate the ability to carry out the technical routine maintenance of beef cattle | - Showing the ability in deworming, creepfeding, and identification systems (ear tags, ear notches, ear tattoos, hot branding)<br>- Showing the understanding and ability to do Dehorning (Mechanical, Electrical, Chemical, and Biological)<br>- Showing the understanding and ability to perform castration (open and closed) | First Technical Routine Maintenance:<br>- Deworming,<br>- Creepfeding,<br>- Identification System (ear tag, ear notch, ear tattoo, hot branding) (Andre)<br>- Dehorning (Mechanical, Electrical, Chemical, and Biological)<br>- Castration (open and closed)<br>(Andre) | Lecture, Discussion, Practicum and Assignments | - Criteria: Able to show and explain with accurate analysis<br>- Assessment: Assignments, Practicum and Final Exam | |

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| 10 | Able to explain the principles of animal welfare and demonstrate ability in the implementation of animal management, transportation, and slaughter processes | - Showing an understanding of animal welfare theory<br>- Showing the ability in the implementation of animal welfare | - Theory of animal welfare (5 *freedom*)<br>Application of animal welfare (Maintenance, Transport and Slaughter of Animals)<br>(Bu Kuswati) | Lecture, Discussion and Assignments | - Criteria: Able to show and explain with accurate analysis<br>- Assessment: Assignments, Practicum and Final Exam | |
| 11 | Able to demonstrate and explain animal transportation management | - Showing an understanding of animal transporting management (management, vehicle design, transport and unloading processes) | Animal Transport Management:<br>- Preparation management, during the trip and upon arrival<br>- Shipping vehicles, trucking<br>- Vehicle capacity for various animals and phases<br>- Maintenance SOP during transportation<br>(Pak Hary) | Lecture, Discussion and Assignments | - Criteria: Able to show and explain with accurate analysis<br>- Assessment: Assignments, and Final Exam | |
| 12 | Able to demonstrate the ability to carry out the technique and process of slaughtering beef cattle | - Showing an understanding of the requirements for slaughtering animals to produce ASUH meat<br>- Showing the ability to properly | - Terms for slaughtering animals<br>- Infrastructure in the cutting process<br>- Handling of animals in the process of slaughtering cattle is in accordance with | Lecture, Discussion, Practicum and Assignments | - Criteria: Able to show and explain with accurate analysis<br>- Assessment: Assignments, practicum | |

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| | | slaughter animals to produce ASUH (Safe, Healthy, Whole, Halal) meat | the principles of animal welfare<br>- Halal Cattle Slaughter Process<br>(Andre) | | and Final Exam | |
| 13 | Able to explain functions, requirements for establishment, work flow and be able to design slaughterhouses | - Showing the understanding of the function of the slaughterhouse<br>- Showing understanding in terms of the establishment of an abattoir<br>- Showing the understanding of the workflow of the abattoir<br>- Showing the ability in designing Slaughterhouse plans | - Slaughterhouse<br>(Pak Nasich) | Lecture, Discussion, Practicum and Assignments | - Criteria: Able to show and explain with accurate analysis<br>- Assessment: Assignments, practicum and Final Exam | |
| 14 | Able to explain and evaluate carcass and non-carcass parts and assess meat quality | - Demonstrating an understanding of the carcass and non-carcass parts of beef cattle | Carcass:<br>- Introduction of carcass and non-carcass parts in various animals<br>(Bu Kuswati) | Lecture, Discussion, and Assignments | - Criteria: Able to show and explain with accurate analysis<br>- Assessment: Assignments, and Final Exam | |
| 15 | Able to explain and evaluate carcass quality | - Showing the ability to assess carcass quality in beef cattle | Carcass Quality:<br>- Determination of carcass quality | Lecture, Discussion, and | - Criteria: Able to show and explain with | |

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| | | | (carcass grade) in beef cattle<br>- Percentage/ amount of each part of carcass and non-carcass<br>(Bu Kuswati) | Assignments | accurate analysis<br>- Assessment: Assignments, and Final Exam | |
| 16 | FINAL EXAM | | | | | |

# ASSESSEMENT RUBRIC

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| | **UNIVERSITY OF BRAWIJAYA**<br>**FACULTY OF ANIMAL SCIENCE**<br>**DEPARTMENT OF ANIMAL SCIENCE**<br>**UNDERGRADUATE STUDY PROGRAM OF ANIMAL SCIENCE** |
| Course | Meat Production |

| Score Level | CLO and PLO | Conversion | PLO Score |
|---|---|---|---|
| PLO 4: Able to develop comprehensive insight and mindset according to the science and field of the animal industry<br>PLO 6: Able to apply biological science, physiology, nutrition science, breeding science, animal raising management to comprehend the concept and implement it in the field of animal science<br>CLO 1: Able to explain, describe, and predict the potential population and demand for beef cattle | | | |
| Very Good (4) | Showing the mastery of **comprehensive** concepts related to the potential in the supply of beef cattle to meet the national demand for meat in the livestock sector | 80-100 | 0.5 |
| Good (3) | Showing the mastery of **good** concepts related to the potential in the supply of beef cattle to meet the national demand for meat in the livestock sector | 70-79 | 0.375 |
| Moderate (2) | Showing the mastery of **limited** concepts related to the potential in the supply of beef cattle to meet the national demand for meat in the livestock sector | 60-69 | 0.25 |
| Poor (1) | Showing the mastery of **very limited** concepts related to the potential in the supply of beef cattle to meet the national demand for meat in the livestock sector | <60 | 0.125 |

| Score Level | CLO and PLO | Conversion | PLO Score |
|---|---|---|---|
| PLO 4: Able to develop comprehensive insight and mindset according to the science and field of the animal industry<br>PLO 6: Able to apply biological science, physiology, nutrition science, breeding science, animal raising management to comprehend the concept and implement it in the field of animal science<br>CLO 2: Able to identify and mention breeds of cattle and the potential of each nation. | | | |
| Very Good (4) | Showing the ability to identify and name cattle breeds **comprehensively** | 80-100 | 0.5 |
| Good (3) | Showing the ability to identify and name cattle breeds **well** | 70-79 | 0.375 |
| Moderate (2) | Showing the **limited** ability to identify and name cattle breeds | 60-69 | 0.25 |
| Poor (1) | Showing the **very limited** ability to identify and name cattle breeds | <60 | 0.125 |

| Score Level | CLO and PLO | Conversion | PLO Score |
|---|---|---|---|
| PLO 6: Able to apply biological science, physiology, nutrition science, breeding science, animal raising management to comprehend the concept and implement it in the field of animal science<br>CLO 3: Able to explain the period of animal growth, the factors that affect animal growth, and the engineering of the growth of beef cattle | | | |
| Very Good (4) | Showing the ability to explain **comprehensively** the period of animal growth, factors that affect animal growth, and engineering of beef cattle growth | 80-100 | 1 |
| Good (3) | Showing the ability to explain **well** the period of animal growth, factors that affect animal growth, and engineering of beef cattle growth | 70-79 | 0.75 |
| Moderate (2) | Showing the **limited** ability to explain the period of animal growth, factors that affect animal growth, and engineering of beef cattle growth | 60-69 | 0.5 |
| Poor (1) | Showing the **very limited** ability to explain the period of animal growth, factors that affect animal growth, and engineering of beef cattle growth | <60 | 0.25 |
| Score Level | CLO and PLO | Conversion | PLO Score |
| PLO 4: Able to develop comprehensive insight and mindset according to the science and field of the animal industry<br>PLO 7: Able to demonstrate independent, quality, and measurable performance (both quality and quantity) effectively, efficiently, and sustainably<br>CLO 4: Able to demonstrate the ability to measure vital statistics and BCS, predict body weight and visually compare body parts of cattle and compare ideal and non-ideal animals, and evaluate carcass production and quality. | | | |
| Very Good (4) | Showing a **comprehensive** ability to measure vital statistics and BCS, predict body weight and visually compare body parts and compare ideal and non-ideal animals, and evaluate carcass production and quality | 80-100 | 0.5 |
| Good (3) | Showing a **good** ability to measure vital statistics and BCS, predict body weight and visually compare body parts and compare ideal and non-ideal animals, and evaluate carcass production and quality | 70-79 | 0.375 |
| Moderate (2) | Showing a **limited** ability to measure vital statistics and BCS, predict body weight and visually compare body parts and compare ideal and non-ideal animals, and evaluate carcass production and quality | 60-69 | 0.25 |
| Poor (1) | Showing a **very limited** ability to measure vital statistics and BCS, predict body weight | <60 | 0.125 |

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| | and visually compare body parts and compare ideal and non-ideal animals, and evaluate carcass production and quality | | |
| Score Level | CLO and PLO | Conversion | PLO Score |
| PLO 6: Able to apply biological science, physiology, nutrition science, breeding science, animal raising management to comprehend the concept and implement it in the field of animal science<br>PLO 7: Able to demonstrate independent, quality, and measurable performance (both quality and quantity) effectively, efficiently, and sustainably<br>CLO 5: Able to create technical workflow (SOP) for routine maintenance (deworming, creepfeeding, animal identification, dehorning, castration), animal transportation, and animal slaughter. | | | |
| Very Good (4) | Showing ability to develop technical workflow (SOP) for routine maintenance (deworming, creepfeeding, animal identification, dehorning, castration), animal transportation, and cattle slaughter **comprehensively** | 80-100 | 0.5 |
| Good (3) | Showing ability to develop technical workflow (SOP) for routine maintenance (deworming, creepfeeding, animal identification, dehorning, castration), animal transportation, and cattle slaughter **well** | 70-79 | 0.375 |
| Moderate (2) | Showing **limited** ability to develop technical workflow (SOP) for routine maintenance (deworming, creepfeeding, animal identification, dehorning, castration), animal transportation, and cattle slaughter | 60-69 | 0.25 |
| Poor (1) | Showing **very limited** ability to develop technical workflow (SOP) for routine maintenance (deworming, creepfeeding, animal identification, dehorning, castration), animal transportation, and cattle slaughter | <60 | 0.125 |
| Score Level | CLO and PLO | Conversion | PLO Score |
| PLO 3: Demonstrate attitudes of friendly and caring about animal welfare and permissible *(halal)* consumption<br>PLO 7: Able to demonstrate independent, quality, and measurable performance (both quality and quantity) effectively, efficiently, and sustainably<br>CLO6: Able to design stables and provide examples of the application of animal welfare in animal transportation, management and slaughtering animals | | | |
| Very Good (4) | Showing the ability to design pens and provide examples of the application of animal welfare in animal transportation, raising and slaughtering animals **comprehensively** | 80-100 | 0.5 |
| Good (3) | Showing the ability to design pens and provide examples of the application of | 70-79 | 0.375 |

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| | animal welfare in animal transportation, raising and slaughtering animals **well** | | |
| Moderate (2) | Showing **limited** ability to design pens and provide examples of the application of animal welfare in animal transportation, raising and slaughtering animals | 60-69 | 0.25 |
| Poor (1) | Showing **very limited** ability to design pens and provide examples of the application of animal welfare in animal transportation, raising and slaughtering animals | <60 | 0.125 |

Calculating PLO Score: $\frac{Level\ Skor}{\sum level\ skor} \times \frac{\sum CLO}{\sum PLO}$

CLO Score Calculation

| Assessed components | Component Weights | CLO Weight on the Score | | | | | |
|---|---|---|---|---|---|---|---|
| | | CLO 1 | CLO 2 | CLO 3 | CLO 4 | CLO 5 | CLO 6 |
| Practicum | 0.3 | | 0.3 | | 0.3 | 0.2 | 0.2 |
| Midterm Test | 0.35 | 0.3 | 0.3 | 0.4 | | | |
| Final exam | 0.35 | | | | 0.4 | 0.3 | 0.3 |
| Structured Assignment | 0.05 | 0.25 | 0.25 | | 0.25 | 0.25 | |
| Quiz | 0.05 | 0.25 | 0.25 | | | 0.25 | 0.25 |

PLO Score Calculation

| CLO | CLO Score | CLO Score | PLO | | | |
|---|---|---|---|---|---|---|
| | | | PLO 3 | PLO 4 | PLO 6 | PLO 7 |
| CLO 1 | | | | 0.5 | 0.5 | |
| CLO 2 | | | | 0.5 | 0.5 | |
| CLO 3 | | | | | 1.0 | |
| CLO 4 | | | | 0.5 | | 0.5 |
| CLO 5 | | | | | 0.5 | 0.5 |
| CLO 6 | | | 0.5 | | | 0.5 |

# Lecture Portfolio

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| | **UNIVERSITY OF BRAWIJAYA**<br>**FACULTY OF ANIMAL SCIENCE**<br>**DEPARTMENT OF ANIMAL SCIENCE**<br>**PORTFOLIO OF BEEF CATTLE PRODUCTION SCIENCE COURSE** |

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| Course: Meat Production | Code: PEP61002 | RMK: | Semester: 3 |
| Lecturer | 1. Dr. Ir. Kuswati, MS.,IPM, ASEAN Eng<br>2. Dr. Ir. Moch Nasich, MS<br>3. Dr. Ir. Hary Nugroho, MS<br>4. Wike Andre Septian, S.Pt.,M.Si<br>5. Irida Novianti, S.Pt.,M.Agr.Sc | | |

**Introduction** (Describe the explanation needed about this course, experiences that have been conducted)

The course discusses the role of beef cattle in providing meat for the community; government policies in beef cattle farming; various breeds of beef cattle developed for meat production; growth and development of beef cattle and the factors that influence them. Visual animal assessment and measurement of body condition score are related to management and judging, as well as evaluation of carcass production and quality. Routine maintenance techniques and design of pens and transportation equipment in accordance with animal welfare principles.

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| 1 | **Objectives** (Describe general or specific course objectives) |
| | 1. Students are able to explain, describe, and predict the potential population and needs for beef cattle (LO4, LO6)<br>2. Students are able to identify and name the breeds of cattle and the potential of each nation. (LO4 and LO6)<br>3. Students are able to explain the period of animal growth, factors that affect animal growth, and engineering of beef cattle growth (LO6).<br>4. Students are able to demonstrate the ability to measure vital statistics and BCS, predict body weight and visually compare body parts of cattle and be able to compare ideal and non-ideal animals, and evaluate carcass production and quality. (LO4, LO7)<br>5. Students are able to create technical workflow (SOP) for routine maintenance (deworming, creepfeeding, animal identification, dehorning, castration), animal transportation, and cattle slaughter. (LO6, LO7)<br>6. Students are able to design stables and provide examples of the application of animal welfare in animal transportation, raising and slaughtering animals (LO3, LO7) |
| 2 | **Learning Strategy** (Describe the strategies used to achieve course objectives - CLO) |
| | Learning strategies carried out in lectures, such as giving lectures, discussions, structured assignments, quizzes, group presentations and practicum using the concepts of SCL (Student Center Learning) and TCL (Teacher Center Learning). |

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| 3 | **Lecture Management** (Describe the management of lectures: lectures, tutorials, practicum, assignments, major assignments, etc.) |
| | 1) Lecture: Duration of 100 minutes/meeting (14 meetings)<br>2) Practicum: 50 minutes/meeting (14 meetings)<br>3) Structured assignments/ quizzes/ group presentation<br>4) Attendance: 80% of total attendance |
| 4 | **Lecture Contents** (Explain the suitability with the applicable curriculum) |
| | 1. Introduction, introduction to the beef cattle industry and the dynamics of the development of beef cattle<br>- Animal population<br>- Supply chain and demand<br>- The need for beef cattle products<br>2. Breeds of large, small, and pig ruminant animals<br>- Cow<br>- Goat<br>- Buffalo<br>- Sheep<br>- Pig<br>3. Growth and Development of Beef Cattle<br>- Growth period<br>- Method<br>- Growth Engineering<br>4. Pens<br>- Cowshed<br>- Goat pen<br>- Sheepfold<br>- Pig Pen<br>5. Visual Animal Assessment (Judging and BCS)<br>- Vital Statistic<br>- Judging<br>- BCS<br>6. Technical Routine Maintenance<br>- Castration<br>- Dehorning<br>- Identification System (ear tag, ear notch, ear tattoo)<br>7. Animal Welfare<br>8. Beef Cattle Transportation<br>9. Slaughterhouses and Slaughterhouses<br>10. Evaluation of Carcass Production and Meat Quality |
| 5 | **Lecture Participants** (give an overview of lecture participants) |
| | The lecture participants are 3rd semester students who have passed the Biology, Animal Anatomy and Physiology courses |
| 6 | **Percentage of Attendance** (% attendance of lecturers; % attendance of students) |

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| | Lecturers are required to be present 100% in the lecture process, while students have a maximum tolerance for absence of 20% to be able to take the Final Exam |
| 7 | **Evaluation System** (explain homework, quizzes, group assignments, practicum, etc.) |
| | Midterm Test: 30%<br>Final Exam:30 %<br>Practicum :30 %<br>Structured assignment/quiz:10% |
| 8 | **Class Observation** (explain important and interesting things encountered during the lecture) |
| | |
| 9 | **Learning Outcomes** (explain the achievement of the goals that have been set including learning achievements that can be explained) |
| | 1. LO3 Demonstrate attitudes of friendly and caring about animal welfare and permissible (halal) consumption<br>2. LO4 Able to develop comprehensive insight and mindset according to the science and field of the animal industry<br>3. LO6 Able to apply biological science, physiology, nutrition science, breeding science, animal raising management to comprehend the concept and implement it in the field of animal science<br>4. LO7 Able to demonstrate independent, quality, and measurable performance (both quality and quantity) effectively, efficiently, and sustainably<br>5. LO10 Able to involve themselves in the learning process and discussion on an ongoing basis |
| 10 | **Obstacles** (provides an overview of the main obstacles in learning) |
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| 11 | **Score Distribution** (provide the score distribution following the learning outcome of this course) |
| | The evaluation is done by carrying out:<br>1. Quiz (5%), with a weighted score of CLO 1, 2, 5 and 6: 25%<br>2. Structured assignments (5%), with a weighted score of CLO 1, 2, 4 and 5: 25%<br>3. Practicum (30%), a weighted score of CLO 2 and 5: 30%; CLO 5 and 6: 20%<br>4. Midterm Exam (30%) with a weighted score of CLO 1 and 2: 30%, CLO 3: 40%<br>5. Final Exam (30%) with a weighted score of CLO 5 and 6: 30%, CLO 4: 40% |
| 12 | **Conclusion** |
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| 13 | **Improvement Recommendations** |
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| | **Appendices:** |
| | 1.<br>2.<br>etc. |