


COURSE LEARNING PLAN

	UNIVERSITY BRAWIJAYA FACULTY OF ANIMAL SCIENCE DEPARTMENT OF ANIMAL SCIENCE UNDERGRADUATE STUDY PROGRAM OF ANIMAL SCIENCE LESSON PLAN: EPIDEMIOLOGY			
Course	Code	Weight (credits)	Semester	Compilation Date
EPIDEMIOLOGY	PEF 4006	(2-1)	EVEN (VI)	August 27, 2020
Aunthorization	Course Coordinator		Head of Undergraduate Study Program	
	Rositawati Indrati, Dr. drh.MP		Herly Evanuari. Dr.S.Pt.,MP	
				Vice Dean 1
				M.Halim Natsir. Dr.S.Pt., MP. IPM
Learning Outcomes (LO)	LO			
	LO 4: Able to develop comprehensive insight and mindset according to the science and field of the animal industry. LO 6: Able to apply Biological Science, Physiology, Nutritional Science, Breeding Science, and Livestock Farming Management to comprehend the concept and implement it in the field of animal science. LO 11: Able to show performance, both independently and in teamwork (inter-and multi-disciplinary), identify and analyze to solve problems in a quality and measurable way LO 12: Able to design and conduct experiments, analyze, and interpret data to make correct decisions in solving problems in the field of animal science, meet ethics, and have environmental insight.			
Brief Course Description	CLO (Revision)			
	1. Able to explain the concepts and techniques of epidemiology and identify the factors that cause the incidence of disease from the management aspect. 2. Comprehend the types of Strategic Infectious Animal Diseases (PHMS) in livestock based on Decree of Minister of Agriculture of the Republic of Indonesia Number 4026/KPTS/OT.140/4/2013. 3. Able to calculate the incidence and risk factors for disease. 4. Comprehend theoretical concepts and able to formulate epidemiological disease prevention programs involving livestock groups based on animal health management programs. 5. Conduct an economic analysis of the impact of disease on livestock business in an effort to control the disease transmission in livestock based on the Law on Husbandry and Animal Health.			

	animals to humans through livestock and the food chain of livestock.	
Learning Contents	<ol style="list-style-type: none"> 1. Introduction: introduction to the scope, objectives, and benefits of epidemiology in the livestock sector 2. Basic Concepts of Animal Epidemiology 3. Determinant Factor I: Host 4. Determinant Factor II: HOUSING, ENVIRONMENT, AND NUTRITION 5. Determinant Factor III: Disease Agent 6. Epidemiological Study Variables 7. Distribution and Pattern of Disease Transmission 8. Strategic Infectious Animal Diseases (PHMS) & Priorities for Zoonoses in Livestock 9. FOODBORNE DISEASES 10. Animal Health Programs 11. Surveillance, Control, and Eradication 12. Livestock Biosecurity 13. Economic Impact of Livestock Disease 14. Integrated National Animal Health Information System (i-SIKHNAS) 	
References	References: <ol style="list-style-type: none"> 1. Michael Thrusfield. 2008. Veterinary Epidemiology. 3ed. Blackwell Science. Ltd. UK 2. FAO and IDF. 2011. Guide to Good Dairy Farming Practices. Animal Production and Health Guidelines. No.8. Rome 3. FAO and OIE. 2009. Guide to Good Farming Practices for Animal Production Food Safety. Rome 	
Learning Media	Software	Hardware
	Power Point, Videos	Laptop, LCD, White Board
Teaching Team	<ol style="list-style-type: none"> 1. Rositawati Indrati. Dr.drh. MP 2. Masdiana C Padaga. Dr. drh.M.App.Sc 3. Ani Setianingrum. drh M.Sc 4. Widi Nugroho. PhD. drh 	
Prerequisite courses	Prerequisite courses: <ol style="list-style-type: none"> 1. Animal Science Laws and Regulations (PEF 4016). 2. Animal Nutrition & Animal Feed (PEM 4001). 3. Microbiology (PET 4001). 4. Ruminant Animal Production Management (PEP 4015) 5. Non-Ruminant Animal Production Management (PEM 4018). 	

Week (s)	Sub-Course Learning Outcomes (SCLO)	Indicators	Learning Materials/ Topics	Learning Methods	Criteria & Form of Assessment	Weighted Scores (%)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	Able to explain and comprehend the Scope of Epidemiology from the aspect of livestock management	Having a proper understanding of the Scope of Epidemiology	Learning Guidelines for Epidemiology Courses <ul style="list-style-type: none"> Competence to be achieved Scope of teaching materials Lecture rules and regulations, assignments, and scoring system 	1. Lecture 2. Tutorial about Epidemiology from the management aspect	Describe the meaning of epidemiology from aspects of livestock management <ul style="list-style-type: none"> Competence to be achieved Scope of teaching materials Lecture rules and regulations, assignments, and scoring system 	5
2	Able to explain and comprehend the Basic Concepts of Animal Epidemiology based on the epidemiological triad	Having a correct and proper understanding of the Basic Concepts of Animal Epidemiology	Basic Concepts of Animal Epidemiology	1. Lecture 2. Demonstrate...	Describe Basic Concepts of Animal Epidemiology based on the epidemiological triad	5
3	Able to explain and comprehend the Determinants of the Host	Having a correct and proper understanding of the Determinants of the Host	Host determinant factors	1. Lecture 2. Demonstrate...	Explain and identify the Determinants of the Host	5
4	Able to explain and comprehend the Determinant Factors: HOUSING, ENVIRONMENT,	Having a correct and proper understanding of the Determinant Factors: HOUSING, ENVIRONMENT	Determinant Factors: HOUSING, ENVIRONMENT	1. Lecture 2. Demonstrate...	Describe the Determinant Factors: HOUSING, ENVIRONMENT	5

	AND NUTRITION					
5	Able to explain coherently and properly the Determinant Factors of Disease Agent	Having a correct and proper understanding of the Determinant Factors of Disease Agent	Determinant Factors of Disease Agent	1. Lecture 2. Demonstrate...	Describe and Identify the Disease Agent	5
6	Able to explain the Epidemiological Study Variables	Having a correct and proper understanding of the Epidemiological Study Variables	Variabel Studi Epidemiologi	1. Lecture 2. Discussion	Describe the Pre-Assessment in the form of a journal review	5
7	Able to explain the Distribution and Pattern of Disease Transmission	Having a correct and proper understanding of the Distribution and Pattern of Disease Transmission	Distribution and Pattern of Disease Transmission	1. Lecture 2. Discussion	Describe the Distribution and Pattern of Disease Transmission Assessment in the form of journal review	5
8	Able to explain the Strategic Infectious Animal Diseases (PHMS) & Priorities for Zoonoses in Livestock	Having a correct and proper understanding of the Strategic Infectious Animal Diseases (PHMS) & Priorities for Zoonoses in Livestock	Strategic Infectious Animal Diseases (PHMS) & Priorities for Zoonoses in Livestock	1. Lecture 2. Case Study	Describe the Strategic Infectious Animal Diseases (PHMS) & Priorities for Zoonoses in Livestock Assessment in the form of	5
9	Able to explain the Animal Health Programs	Having a correct and proper understanding of the Animal Health Programs	Animal Health Programs	Basic Simulation of Simple Fermentation	Describe the Basic Fermentation Assessment in the form of journal review Of Basic Fermentation	10

10	Able to explain the Surveillance, Control, and Eradication	Having a correct and proper understanding of the Surveillance, Control, and Eradication	Surveillance, Control, and Eradication	Simulation	Describe the Surveillance, Control, and Eradication Assessment in the form of	10
11	Able to explain the Integrated National Animal Health Information System (i-SIKHNAS)	Having a correct and proper understanding of the Integrated National Animal Health Information System (i-SIKHNAS)	Integrated National Animal Health Information System (i-SIKHNAS)	1. Lecture 2. Discussion	Describe the Integrated National Animal Health Information System (i-SIKHNAS) Assessment in the form of journal review	10
12	Able to explain the Strategic Infectious Animal Diseases, Priorities for Zoonoses, and Livestock Biosecurity	Having a correct and proper understanding of the Strategic Infectious Animal Diseases, Priorities for Zoonoses, and Livestock Biosecurity	Strategic Infectious Animal Diseases, Priorities for Zoonoses, and Livestock Biosecurity	1. Lecture 2. Discussion	Describe the Strategic Infectious Animal Diseases, Priorities for Zoonoses, and Livestock Biosecurity Assessment in the form of journal review	10
13	Able to explain the FOODBORNE DISEASES	Having a correct and proper understanding of the FOODBORNE DISEASES	FOODBORNE DISEASES	1. Lecture 2. Discussion	Describe the FOODBORNE DISEASES Assessment in the form of journal review	10
14	Able to explain the Economic Impact of Livestock	Having a correct and proper understanding of the Economic Impact of Livestock	Economic Impact of Livestock Disease	1. Lecture 2. Case Study	Describe the Economic Impact of Livestock Disease	10

	Disease	Disease			Assessment in the form of journal review	
	FINAL EXAM					