GUIDELINES
PROFESSIONAL PROGRAM
IN VETERINARY MEDICINE
(PPDH)

FACULTY OF VETERINARY MEDICINE
UNIVERSITAS AIRLANGGA
2018

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Veterinary Medicine is a branch of medicine that deals with prevention, diagnosis, and treatment of diseases in animals. In general, all types of animals, both domestic and wild animals, can be categorized as patients. Veterinary Medicine degree is pursued through higher education. There are two stages in Veterinary Medicine program: The first stage which must be accomplished is undergraduate education (S-1) which takes eight semesters to complete and be eligible for the title of Bachelor of Veterinary Medicine (SKH). The next stage is Professional Program in Veterinary Medicine (PPDH) which can be accomplished in 1.5 years. After completing PPDH, the graduate will earn the title of Veterinarian (drh).

The term *veteriner*, in the context of veterinary medicine, is an English adapted word derived from veterinary medicine. Related to that context, there are three terms to be acknowledged; namely veterinary science, veterinary medicine and veterinary practice. Those terms depict the scope of veterinary medicine which covers at least the realms of science, profession, and skills. However, the term *veteriner* in relation to animal health regulation, for instance, as mentioned in Law Number 41 of 2014 concerning Animal Husbandry and Animal Health, experiences paradigm shift. In that Law, *veteriner* is defined as all matters relating to animals, animal products, and animal diseases. Meanwhile, *Medik veteriner* is defined as a veterinarian who conducts activities in the field of animal health. Furthermore, *Kesehatan Masyarakat Veteriner* or Veterinary Public Health refers to all matters relating to animals and animal products that directly or indirectly affect human health.

The Faculty of Veterinary Medicine, Universitas Airlangga, is accredited “A” by BAN PT for its S1 and Professional study programs (2015-2020), and received ISO 9001: 2008 Certification, IWA2: 2007, Excellent Education System Base on Malcolm Baldridge (MBNQA), as a member of South East Asia Veterinary School Association (SEAVSA), Association Institute of Tropical Veterinary Medicine (AITVM), and Asian Association Veterinary School (AAVS) (2015-2019) and the Indonesian Veterinary Medicine Faculty Association (AFKHI).

The Guidelines document for the implementation of Professional Program in Veterinary Medicine (PPDH) is designed based on the 2016 Curriculum at the Faculty of Veterinary Medicine, Universitas Airlangga. It comprises vision, mission, educational goals, curriculum structure, veterinary standard competencies, load and length of study, descriptions, detailed activities presented in the form of Semester Learning Plans (RPS) from each PPDH activity manager as well as fieldwork practice (PKL). The fieldwork practice (PKL) are conducted at the Animal Health Center (Puskeswan) and Technical Implementation Unit (UPT), Regional Technical Implementation Unit (UPTD)?? in East Java. Dairy Village Cooperatives (KUD) is a site for fieldwork practice (PKL) of large animals and breeding farm or Poultry Industry is a site for fieldwork practice (PKL) of poultry husbandry, Animal Slaughterhouses, Officials and Quarantines carried out throughout Indonesia. By conducting such activities, it is expected that the veterinarian graduates can achieve Veterinary Competency Standards who are able to follow the...
development of veterinary science and take a significant role in the National Animal Health System.

The Guidelines document for implementation of PPDH is designed for the students who are pursuing the PPDH program in FVM Universitas Airlangga. By comprehending the Guidelines document, PPDH students are expected to be able to develop professionalism, maturity of mind in dealing with various cases as well as the competencies expected by stakeholders and public.

In this occasion, a deep gratitude is expressed to the team and those who have contributed to the completion of the writing of the Guidelines Professional Program in Veterinary Medicine at the Faculty of Veterinary Medicine, Universitas Airlangga.

Surabaya, July, 19th 2018
The Dean,

Prof. Dr. Pudji Srianto, drh., M. Kes.
NIP. 195601051986011001
VISION, MISSION AND OBJECTIVE
FACULTY OF VETERINARY MEDICINE

1. Vision
To become a leading faculty at national and international levels, a pioneer in developing education and research on veterinary medicine and animal husbandry, that is independent and innovative through religion-based moral, ethics, environmental sustainability and animal welfare consciences by remaining oriented toward public welfare.

2. Mission
a. To organize academic, professional, specialist and vocational education on veterinary medicine and animal husbandry based on modern learning technology in order to produce graduates with professional competencies and strong motivation to develop their knowledge, with entrepreneurial ethos, who uphold religion-based moral and ethics
b. To conduct basic, applied, and policy-oriented research programs which are highly qualified and innovative in the veterinary and animal husbandry to support the development of science, education and community service based on religion-based morals, ethics, environmental sustainability and animal welfare.
c. To dedicate and provide services of veterinary science and animal husbandry expertise to community.
d. To establish mutually beneficial partnerships with related institutions in order to achieve independence of the faculty focusing on its quality and competitiveness at national and international levels.

3. Educational Objectives
a. To produce high-quality and dignified graduates with competencies to integrate, implement, and develop veterinary science and animal husbandry to be competitive at national and international level
b. To produce innovative research to solve problems occurred in the society and to promote the development of science and technology in the field of veterinary and animal husbandry
c. To produce community service works with competencies to improve the community skills in identifying, formulating, and solving problems related to veterinary and animal husbandry field independently and sustainably.
d. To achieve the faculty independence that is adaptive, creative, and proactive to the demand in the development of science and technology in the field of veterinary and animal husbandry.
e. To develop research-based entrepreneurial faculty with world-class excellence founded on values of nationalism, religion-based moral, ethics, environmental sustainability, and animal welfare.
DEGREE DEAN
FACULTY OF VETERINARY MEDICINE
UNIVERSITAS AIRLANGGA
--------------------------------------------------
No: 143 / UN3.1.6 / 2018
Regarding:
THE IMPLEMENTATION OF THE GUIDELINES OF VETERINARY PROFESSIONAL STUDIES
FACULTY OF VETERINARY MEDICINE
UNIVERSITAS AIRLANGGA
2018

THE DEAN OF THE FACULTY OF VETERINARY MEDICINE
UNIVERSITAS AIRLANGGA

Noting : a. That to support a successful implementation of education in the Faculty of Veterinary Medicine, Universitas Airlangga, especially Veterinary Professional Studies, it is necessary to establish the manual of Veterinary Professional Education of Faculty of Veterinary Medicine, Universitas Airlangga 2018;

b. That in relation with point (a), it is necessary to publish a Decree of the Dean of the Faculty of Veterinary Medicine, Universitas Airlangga.

Bearing in mind : 1. Law Number 20 Year 2003 regarding the National Education System (State Gazette of the Republic of Indonesia of 2003 Number 78, Supplement to the State Gazette of the Republic of Indonesia Number 4301;

2. Government Regulation Number 30 Year 2006 regarding to the decree of Universitas Airlangga as BHMN (LNRI 2006 No. 66);

3. Government Regulation Number 30 Year 2014 regarding the Statute of Universitas Airlangga (LNRI No. 100, TLN 5535);

4. Decree of the Minister of Education and Culture of the Republic of Indonesia Number: 055 / O / 1972 dated March 25, 1972 regarding the Establishment of the Faculty of Veterinary Medicine, Universitas Airlangga;


6. Rules of the Board of Trustees Number: 12 / P / MWA-UA / 2008 regarding the Bylaws of Universitas Airlangga;

7. Rector Regulation No. 42 Year 2016 regarding the
Structure of Organization and Work Procedure of Universitas Airlangga;


10. Decree of the Board of Trustees number 01 / H3.MWA / K / 2012 regarding Strategic Plan of Universitas Airlangga and the Rector's Decree number 5857 / H3 / KR / 2012 regarding the Operational Program of Strategic Plan of Universitas Airlangga's 2012-2017 as the basis for developing the Strategic Plan for the Rector in the period 2015-2020 about World Class University.

Considering:
- Results of the National Workshop of Veterinary Medicine Higher Education, in Bogor on 26-28 April 1999;
- Agreement between five Faculties of Veterinary Medicine in Indonesia and the Executive Board of the Indonesian Veterinary Association.
- Workshop between Association of the Indonesian Veterinary Faculty and the Executive Board of the Indonesian Veterinary Association on February 18-19, 2010
- Redesign of 2016 Curriculum of Veterinary Professional Studies
- Establishment of the Association of the Indonesian Veterinary Reproductive Department (ADERVI) on July 28, 2018 at the Faculty of Veterinary Medicine, Universitas Gadjah Mada (UGM) Yogyakarta

Decide:

Stipulate First: Certify the enactment of The Guidelines of Professional Program in Veterinary Medicine of the Faculty of Veterinary Medicine of Universitas Airlangga 2018 with the following stages:
1. The entire contents of the The Guidelines of Professional Program in Veterinary Medicine of the Faculty of Veterinary of Medicine Universitas
Airlangga 2018 are directed to students of Professional Program in Veterinary Medicine cohort 2018.

2. The students of the cohort of the previous year(s) still use the Guidelines of Veterinary Professional Studies from the previous year(s);

Second : The educational provisions that have not been stipulated in this Decree will be determined later.

Third : This decree is effective from the stipulated date with a certain provision that if in the future there is a deficiency or error in this decree, it will be corrected accordingly.

Fourth : Any decisions contrary to this Decree are declared null and void.

Stipulated in: Surabaya
On: July 19, 2018

Dean,

Prof. Dr. Pudji Srianto, drh., M.Kes.
NIP 195601051986011001

Copies delivered to the Honorable:
- Rector of Universitas Airlangga
CHAPTER I
INTRODUCTION

1.1 BACKGROUND

The Faculty of Veterinary Medicine of Universitas Airlangga, in implementing the Tridharma of Higher Education, commits to produce high-quality graduates who are able to integrate, implement and develop veterinary medicine and husbandry in order to be able to compete at national and international levels.

Professional Program in Veterinary Medicine (PPDH) of the Faculty of Veterinary Medicine of Universitas Airlangga is a continuation of the Bachelor Degree of Veterinary Medicine Program, in accordance with the Decree of the Minister of Education and Culture of the Republic of Indonesia Number 0311 in 1994 and Government Regulation Number 60 in 1999 and the Results of the National Workshop of the Indonesian Veterinary Higher Education, in Bogor on April 26-28, 1999.

The Indonesian Veterinary Curriculum Workshop at the Faculty of Veterinary Medicine of Universitas Airlangga, on June 6-7, 2000 resulted a ratification between five Faculties of Veterinary Medicine in Indonesia and the Executive Board of the Indonesian Veterinary Medical Association (PB-PDHI) in organizing Veterinary Professional Studies. Inside the document, it is stated that the implementation of Professional Program in Veterinary Medicine is carried out in their respective universities, while the profession organizations provide input about the competencies that must be acquired by the students enrolling in the Veterinary Professional Studies Program.

The new paradigm of Indonesian Veterinary Higher Education emphasizes the importance of standardizing graduates by considering points of views from wider society, including Indonesian Veterinary Medical Association, and it should be stated in the Veterinary Standard Competencies. The PPDH of the Faculty of Veterinary Medicine of Universitas Airlangga implements the curriculum resulted from the PPDH Workshop at the Faculty of Veterinary Medicine of Universitas Airlangga on February 25, 2004, the PPDH Workshop in Bali, and the Re-design of 2016 Curriculum to meet the veterinary competency standards. On February 18-19, 2010 at the Faculty of Veterinary Medicine of Universitas Airlangga, the Association of the Indonesian Faculty of Veterinary Medicine (AFKHI) was founded to discuss the PPDH curriculum which will be continually reviewed to improve the competency of veterinarian graduates according to the needs of stake holders. Furthermore, on July 28, 2018 the Association of Veterinary Reproduction Department of Indonesia (ADERVI) was formed at the Faculty of Veterinary Medicine, University of Gadjah Mada (UGM) to discuss the PPDH curriculum in the Veterinary Reproduction Department. Its main goal is to raise competencies of veterinary graduates according to the needs of stake holders so that they have the competence to take the medical action in reproduction as well as reproductive technology such as: Artificial Insemination (IB), pregnancy testing (PKB) and reproductive diagnosis.

In the document of Revitalization of the Professional Program in Veterinary Medicine dated 11 July 2013 approved by the Directorate of Learning and Student Affairs, Directorate-General of Higher Education and
the Executive Board of the Indonesian Veterinary Association, it was stated that the Organisation Mondiale de la Sante Animale (Office Internationale des Epizootique, OIE) or World Organization for Animal Health contributes a significant role toward animal health insurance by improving the life of animal, human and ecosystem. Office Internationale des Epizootique also provides assistance on efforts to improve the quality of veterinary education. Realizing the wide range of varieties in establishing the veterinary education throughout the world, in 2009 OIE set minimum standards of the core curriculum, competency standard of fresh graduates of Veterinary Medicine program (the day one Veterinarian), and accreditation of Veterinary Medicine program.

The new minimum standards for veterinarians according to the OIE is to comprehend, understand, and be able to apply veterinary medical actions consisting of:

1) Biological principles and mechanisms of animal health and diseases starting from the molecular level, cellular level to their manifestations in the population;
2) Physiologic, homeostasis, and pathobiologic functions, natural history, and the manifestations of the significance of domestic and exotic animal diseases;
3) Obtaining adequate medical history by recording, storing and utilizing medical information;
4) Effective communication with clients, colleagues, and authorities;
5) The application of theory and practice of internal medicine and veterinary surgery to various types of animal species. This application must include disease prevention, the ability to apply and interpret physical and laboratory diagnostic methods, including imaging diagnostic, pathology diagnoses, biosecurity, therapeutic measures including surgery, patient management, and individual and population care;
6) Principles of epidemiology, zoonosis, food security, mutual relations between animals and the environment, and the contribution of veterinarians to public health;
7) Understanding farm system in a work place, particularly a comprehensive understanding toward factors that reduce the quality of health, welfare and livestock production;
8) Professional ethics and service to the community;
9) Knowledge, skills, values, attitudes and behaviors needed as accountability for animal health and welfare in accordance with the dynamic social change;
10) Ability to use science to investigate problems related to animal health and production, and to improve current knowledge and professional abilities to improve the quality of animal health services continuously.

1.2 The Objectives of the Professional Program in Veterinary Medicine

The objectives of Professional Program in Veterinary Medicine are:
1. Educating candidate Veterinarians with practical and systematic skills to become professional Veterinarians
2. Educating candidate Veterinarians toward any possible cases in the workplace, both individually and in groups, by thoroughly exploring the procedures for diagnosis, prognosis, and therapy.

3. Extending philosophical, academic, and professional knowledge of Veterinarians, veterinary public health, and animal health management.
CHAPTER II
CODE OF CONDUCT
PROFESSIONAL PROGRAM IN VETERINARY MEDICINE

2.1. The Implementation of Professional Program in Veterinary Medicine (PPDH program)

1. The admission of new students in the PPDH program is held every semester (on February and August).
2. Participants of PPDH program for each period or year are grouped based on the PPDH program.
3. The implementation of PPDH is in accordance with the academic calendar used in the Faculty of Veterinary Medicine, Universitas Airlangga, that lasts for about 3 (three) semesters.
4. The maximum length of study of PPDH program is 4 semesters (2 years).
5. Every participant of PPDH program who will postpone, cancel, or leave the program must receive an approval letter from the Dean of the Faculty of Veterinary Medicine, Universitas Airlangga and the leave must be no longer than two semesters (1 year).
6. Participants of the PPDH program that have been running co-assistance in a department will run his/her co-assistance for a maximum of two semesters (1 year). If she/he exceeds the allowed duration, she/he will be considered failed and must apply for the readmission to PPDH program.
7. Participants of the PPDH program will be grouped and required to take part in activities based on the system, time, and type of activities. The participants of PPDH program are not allowed to move to another group until the co-existence period ends.
8. Evaluation (exam) of the PPDH program is carried out at the end of each co-existence activity in the Department, and model of the exam is self-regulated by the Department listed in the Professional Program in Veterinary Medicine Procedure Manual and Semester Learning Plan (RPS). The results of the evaluations are processed using the Benchmark Reference Assessment (PAP) with 7 (seven) Grades (A, AB, B, BC, C, D, and E).

<table>
<thead>
<tr>
<th>Raw Score</th>
<th>Score in Letter</th>
</tr>
</thead>
<tbody>
<tr>
<td>86-100</td>
<td>A</td>
</tr>
<tr>
<td>78 - &lt;86</td>
<td>AB</td>
</tr>
<tr>
<td>70 - &lt;78</td>
<td>B</td>
</tr>
<tr>
<td>63 - &lt;70</td>
<td>BC</td>
</tr>
<tr>
<td>54 - &lt;63</td>
<td>C</td>
</tr>
<tr>
<td>40 - &lt;54</td>
<td>D</td>
</tr>
<tr>
<td>&lt; 40</td>
<td>E</td>
</tr>
</tbody>
</table>
2.2. Admission of Professional Program in Veterinary Medicine (PPDH program) Students

1. Academic Requirements
   a) The PPDH program participants are Bachelors of Veterinary Medicine who have graduated from Veterinary Study Program, Faculty of Veterinary Medicine, Universitas Airlangga.
   b) The admission of PPDH students is conducted by applying directly at the Faculty of Veterinary Medicine, Universitas Airlangga.

2. Administrative and Registration Requirements
   a) Submitting Official Statement of Graduation or Testamur of Bachelor of Veterinary Medicine.
   b) Filling out the participant application form of PPDH program.
   c) Paying the predetermined Education Operational Donation (SOPs) and Education Development Improvement Donation (SP3) of PPDH program.

2.3. Rights and Obligations of Students of the Veterinary Professional Studies

1. Each participant of PPDH program has the right to obtain educational services in accordance with the stated program objectives.
2. Each participant of the PPDH program is required to comply with the norms and ethics implemented at Universitas Airlangga.
3. Each participant may not be present more than 15 minutes late except for reasons that can be justified.
4. Each participant of PPDH program is required to dress neatly and politely during the PPDH program in accordance with the situation, condition, type, and timing of the activities she/he follows.
5. Each participant of PPDH program is required to take part in the entire set of PPDH activities that have been determined.
6. By being absent for 1 (one) day or more from each type of program without any information/valid letter for a maximum of 2 (two) days, the participant is required to retake all activities in the Department in which the time will be determined later.
7. Every participant of PPDH program is required to prepare general equipment (e.g., laboratory coats, stethoscopes, boots, cattle packs, gloves, and hand sanitizer) needed in accordance with the provisions of the PPDH program (Department).
8. Each participant of PPDH program is required to pay the predetermined Donation for Educational Operation (SOP) and the Education Guidance and Improvement Fee (SP3). If a participant cannot continue attending the program’s sequence activities with or without any reason after being admitted as a participant in the PPDH program and once participating in its activities, the Donation for Educational Operation (SOP) that has been paid cannot be refunded. Furthermore, the participant is required to repay the Donation for Educational Operation (SOP) and a big
amount of SP3. Meanwhile, the method of payment follows the applicable provision at the time of readmission.

2.4. Sanctions / Violations
Any deviation or violation of the determined rules will be subjected to sanctions in the form of verbal reprimand, written reprimand, and/or the termination or removal of the right to participate in the PPDH program.

2.5. Graduation Requirements
The graduation requirements for the PPDH program include the following conditions:
1. A participant has attended and passed all the co-assistances in the PPDH department.
2. A participant has been involved in the judiciary led by the Dean of Faculty of Veterinary Medicine, Universitas Airlangga.
3. A participant has attended the inauguration and oath taking of a veterinarian.
4. Every veterinarian graduate is required to take the Indonesian Veterinary Competency National Examination (Ujinak KDHI).

2.6. Graduation Predicate
The predicate of PPDH program graduation is based on the Education Manual of Universitas Airlangga 2018/2019 with the following criteria:

<table>
<thead>
<tr>
<th>Grade Point (GP)</th>
<th>Predicate</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.71 – 4.00</td>
<td>With Compliments (Cumlaude)</td>
</tr>
<tr>
<td>3.41 – 3.70</td>
<td>Very satisfactory</td>
</tr>
<tr>
<td>2.75 – 3.40</td>
<td>Satisfactory</td>
</tr>
</tbody>
</table>
CHAPTER III
CURRICULUM

3.1 Curriculum Load and Structure
Veterinary Professional Education runs for three (3) semesters with a study load of 37 credits. The structure of the curriculum is in the following table:

<table>
<thead>
<tr>
<th>No.</th>
<th>Subject</th>
<th>Study Load (sks)</th>
<th>Length (Weeks)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Code</td>
<td>Title</td>
<td>Lecture</td>
</tr>
<tr>
<td>Semester I</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>General Compulsory Program</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>MNH501</td>
<td>Veterinary and Aquatic Business Management</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>FAT501</td>
<td>Veterinary Therapeutics</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>ETH501</td>
<td>Veterinary Ethics and Animal Welfare</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>KHK570</td>
<td>Health System (<em>One Health</em>) and Animal Nursing</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Profession Compulsory Program</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>KHU501</td>
<td>Co-assistant program of Pathology</td>
<td>-</td>
</tr>
<tr>
<td>6</td>
<td>BIM501</td>
<td>Co-assistant program of Microbiology</td>
<td>-</td>
</tr>
<tr>
<td>7</td>
<td>BIM502</td>
<td>Co-assistant program of Parasitology</td>
<td>-</td>
</tr>
<tr>
<td>8</td>
<td>KMV501</td>
<td>Co-assistant program of Veterinary Public Health</td>
<td>-</td>
</tr>
<tr>
<td>Semester II</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Profession Compulsory Program</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>BIR501</td>
<td>Co-assistant program of Reproduction</td>
<td>-</td>
</tr>
<tr>
<td>10</td>
<td>KKH501</td>
<td>Co-assistant program of Veterinary Clinics</td>
<td>-</td>
</tr>
<tr>
<td>11</td>
<td>KLH502</td>
<td>Fieldwork practice of Large Animal Fieldwork practice of Poultry Teaching Farm</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>Total of study load</td>
<td></td>
<td></td>
<td>37 credits</td>
</tr>
</tbody>
</table>
3.2. DESCRIPTIONS

1. Veterinary and Aquatic Business Management (MNH501)

Semester : I
Number of credits : 2

PIC : Budiarto, drh., MP.
Description : The materials delivered include entrepreneurship, poultry management, large animals management, practitioners' activities, and management of aquatic animals. Evaluation is carried out based on the assignment results of the pre-determined topics in lectures and discussions for 105 minutes in each of 15 meetings.

2. Veterinary Therapeutics (FAT501)

Semester : I
Number of credits : 2

PIC : Prof. Dr. Moh. Lazuardi, drh., M.S.
Description : The materials provided include: 1) Ethics of prescription; 2) cases of outpatient clinics and inpatient care in 5 types of animals including special cases such as gerontology, pediatric, pregnancy, lactation, kidney failure, liver failure and sterile preparations; 3) analysis on the prescription of outpatient and inpatient care; 4) performance on the simple monitoring techniques about veterinary drug abuse and its common mistakes (pharmaceutics, biological, premise) in lecture and discussion for 100 minutes in each of 15 meetings.

3. Veterinary Ethics and Animal Welfare (ETH501)

Semester : I
Number of credits : 2

PIC : Prof. Dr. Ismudiono, drh., MS.
Description : The materials provided include the history of the veterinary profession, ethical and legal understanding, veterinary medical ethics, veterinarian's oath and ethical code, and animal welfare. Evaluation is conducted by measuring the ability of students in the discussion of veterinary medical ethics and animal welfare insights.
4. Health System (One Health) and Animal Nursing (KHK570)
Semester : I
Number of credits : 2
PIC : Dr. Kadek Rachmawati, drh., M.Kes
Description : This subject discusses the concept of one health system which describes the handling of human’s, animal’s and plant’s health as well as the environment; prevention and control of zoonotic diseases integrated from various disciplines of medicine, veterinary medicine, pharmacy, public health, biology, and environment. Animal care discusses about 1) psychological and emotional aspects of animals, 2) how to handle and care for pet, commodity animals, wildlife, and experimental animals.

5. Co-assistance on Veterinary Pathology (KHU501)
Semester : I
Number of credits : 3
PIC : Dr. Thomas Valentinus Widiyatno, drh., M.Sc.
Description : The materials provided include the procedure for taking specimens, proper euthanasia and necropsy techniques, and preparation on histopathology. Evaluation is conducted by examining students’ competency in determining a diagnosis of animal disease based on pathological changes in 3 weeks.

6. Co-assistant program on Veterinary Microbiology (BIM501)
Semester : I
Number of credits : 3
PIC : Prof. Dr. Fedik A. Rantam, drh
Description : The material provided includes isolation and identification of bacteria and viruses, inoculation in experimental animals, antibody detection, virus titration and calculation of virus titers. Evaluation is carried out by measuring student activity, mastery of material (bacterial, viral, mycological and immunological diseases), and comprehensive examinations for 3 weeks.
7. Co-assistant program on Veterinary Parasitology (BIM502)

Semester : I
Number of credits : 3
PIC : Dr. Mufasirin, drh., M.Sc.
Description : The material provided covers the fields of Protozoology, Helminthology and Entomology. Diagnosis of protozoa-based diseases includes 1) gastrointestinal protozoa with fecal examination, gastrointestinal necropsy, swelling of the throat and cranial intestines, and specifically, coccidiosis in chickens is conducted by necropsy and biological tests; 2) blood protozoa including examination of blood smears and specifically, leukocytozoonosis is done by necropsy and grinding internal organs; and 3) toxoplasmosis including fecal examination, brain pressure testing and biological testing.

The diagnosis of helminth disease includes gastrointestinal necropsy for helminth identification, native fecal examination, sedimentation and floatation concentration fecal examination, native and Carmin stain helminth identification, helminth collection with wet media and permanent preparations, examination of worm larvae and eggs from grasslands. Calculation of worm eggs per gram feces to determine the degree of infection.

Diagnosis of mites by skin scraping of rabbits and chickens. The diagnosis is confirm by microscopic examination. Identification of disease-causing arthropods in livestock, such as fleas, ticks and lice, is carried out by making permanent mounts preparation with or without staining, followed by microscopic examination. For arthropods that act as vectors of disease, namely flies and mosquitoes, identification is carried out macroscopically by collecting wet and dry/pinning methods. Evaluation is done by looking at the ability of students to diagnose parasitic disease for 3 weeks.
8. Co-assistant program on the Veterinary Public Health (KMV501)
Semester : I
Number of credits : 4
PIC : Dr. Mustofa Helmi Effendi, drh., DTAPH.
Description : The materials provided cover quality and microbiology of food ingredients taken from animals and the products related to food security and public health (for 2 weeks in the laboratory). This subject also discusses concepts and principles of epidemiology, sampling planning and sample size, and types of studies for investigating the diseases. Furthermore, it includes administration system, structure of Animal Husbandry Service and Animal Quarantine (for 4 weeks in the field). Evaluation is carried out by examining the ability of students, skills and technical knowledge of Veterinary Public Health. The explanation about control and management of strategic zoonosis disease, milk and meat hygiene, animal origin food safety (HACCP) and environmental health, quarantine and veterinary legislation is given to PPDH students for 6 weeks.

9. Co-assistant program on the Veterinary Reproduction (BIR501)
Semester : II
Number of credits : 4
PIC : Dr. Abdul Samik, drh., M.Sc.
Description : The co-assistant program of the Veterinary Reproduction is given to PPDH students for 6 weeks. The materials provided include reproductive anatomy and physiology, reproductive cycle, hormonal reproduction, frozen semen making, artificial insemination, embryo transfer, pregnancy examination, dystocia, and sterilization. Evaluation is done by looking at students' abilities in pregnancy diagnosis, reproductive cases and being able to carry out reproductive techniques in livestock.
10. Co-assistant program on Veterinary Clinics (KKH501)
Semester : II
Number of credits : 6
PIC : Ira Sari Yudaniayanti, drh., MP
Description : The materials provided include performing diagnostic steps both physical and laboratories examination, making diagnosis, establishing prognosis and therapy for small animal diseases, carrying out medical emergency assistance, radiological examination, anesthesia and small animal surgery. Evaluation is done by examining students’ competency in making a diagnosis, establishing the prognosis and therapy for small animal diseases, and understanding the ability to carry out small animal surgery according to the standard for 10 weeks.

11. Field Work Practice (PKL): Large Animals, Poultry, Teaching Farm (KLH502)
Semester : II
Number of credits : 6
PIC : Dr. Trilas Sardjito, drh., M.Sc.
Description : The materials provided include carrying out skills and techniques on raising and caring beef / dairy cattle and poultry by managing the production and reproduction of beef / dairy cattle, large animal and poultry health management and feed management. Evaluation is done by having an exam after the 10-week fieldwork practice is completed.
INSTRUCTIONAL ANALYSIS

Course: Veterinary and Aquatic Business Management
MK Code: MNH501
Study Load: 2 credits
Learning Achievements: After completing the veterinary and aquatic business management lectures, PPDH students are able to have a discourse and insight into veterinary and aquatic animal business opportunities.

Business Insight and discourse in the veterinary and aquatic animals field

- Applying poultry business management knowledge
- Applying managing aquatic animal business knowledge
- Applying how to manage large animals
- Applying business practices

Defining Entrepreneurship
INSTRUCTIONAL ANALYSIS

Course: Veterinary Therapeutics
MK Code: FAT501
Study load: 2 credits
Learning Achievements: After completing the Veterinary Therapeutics course, PPDH students are be able to prescribe rational prescriptions according to the “5 rights” (right medicine, dosage, dosage form, administration method, and time) in large animal, small animal, exotic animal, poultry and aquatic animal.

After completing the Veterinary Therapeutics course, PPDH students will be able to prescribe rational prescriptions according to the “5 rights” (right medicine, dosage, dosage form, administration method and time) in large animal, small animal, exotic animal, poultry and aquatic animal.

TIK 7
Writing rational prescription according to “5 rights” (right medicine, dosage, dosage form, administration method and time) in large animals

TIK 8
Writing rational prescription according to “5 rights” (right medicine, dosage, dosage form, administration method and time) in small animals

TIK 9
Writing rational prescription according to “5 rights” (right medicine, dosage, dosage form, administration method and time) in exotic animals

TIK 10
Writing rational prescription according to “5 rights” (right medicine, dosage, dosage form, administration method and time) in poultry

TIK 11
Writing rational prescription according to “5 rights” (right medicine, dosage, dosage form, administration method and time) in aquatic animals

TIK 1
Able to determine the drugs prescribed for pediatric animal

TIK 2
Able to determine the drugs prescribed for geriatric animals

TIK 3
Able to determine the drugs prescribed for pregnant animals

TIK 4
Able to determine the drugs prescribed for lactating animals

TIK 5
Able to determine the drugs prescribed for animals with special conditions

TIK 6
Able to determine the drugs prescribed topically according to “5 rights” (right dosage, dosage form, administration method and time, patients)
INSTRUCTIONAL ANALYSIS

Course: Veterinary Ethics and Animal Welfare
MK Code: ETH501
Study Load: 2 credits
Learning Achievements: After completing the Veterinarian Ethics and Animal Welfare, PPDH students are able to appreciate the veterinary oath, apply professional and medical veterinary ethics and understand the guidelines for animal protection and welfare.

Diagram:
- Living and practicing veterinary ethics and animal welfare
- Elaborating animal welfare
- Defining veterinary medical ethics
- Defining veterinary oaths and Veterinary codes of ethics
- Defining notion of ethics and law
- Describing the history of veterinary profession
INSTRUCTIONAL ANALYSIS

Course : Health System (One Health) and Animal Nursing
MK Code : KHK570
Study load : 2 credits
Learning Achievements : After participating in this course, PPDH students are able to
1. a) Mapping disease source and distribution, as well as environmental influences on health assessment, capable of conducting, communication, information, and education programs about the essence of One Health to the community. b) Being able to networking and collaborating nationally and internationally. c) Implementing strategic policies in handling One Health 2. Animal care, handling and treating animals based on the psychology and emotional nature of animals.
INSTRUCTIONAL ANALYSIS

Course : Pathology Co-assistance
MK Code : KHU501
Study Load : 3 credits
Learning : After co-assistance in the pathology, PPDH students are able to diagnose animal diseases based on macroscopic and microscopic pathological changes.

- Making diagnosis of animal disease based on macroscopic and microscopic pathological changes
- Interpreting anatomical histopathology and pathology results and examination of infectious and non-infectious diseases
- Describing tissues processing techniques (Histopathological preparations)
- Performing necropsy techniques (Mammals, poultry, wild animal)
- Performing euthanasia techniques (Mammals, poultry, wild animal)
INSTRUCTIONAL ANALYSIS

Course: Microbiology Co-assistance (ex. Bacteriology and Mycology Laboratory)
MK Code: BIM501
Study Load: 3 credits
Learning Achievements: After completing Microbiology co-assistance, PPDH students are able to diagnose bacterial and fungal disease, determine bacterial and fungal disease diagnosis

Diagnosing Bacterial and Fungal Disease

- Biological Test

- Identifying Bacteria and Fungal

- Bacteria and fungal isolation from sample

- Respiratory tract collection
- Digestive tract collection
- Mastitic milk

- Making culture media

- Explaining the procedures of bacteria and fungal examination
  - Tools and materials sterilization
  - Making culture media
INSTRUCTIONAL ANALYSIS

Course: Microbiology Co-assistance (Virology, Immunology Laboratory)

Time: 7 working days

Learning Achievements: After completing Virology and Immunology laboratory Co-assistance, PPDH students are able to determine viral diseases diagnosis based on virus isolation and identification and antibody detection, define and measure immune status, and calculate the viral load.

Determining viral diagnosis, immune status, viral content

(11)

Diagnosing disease (PCR, HI, AGPT, ELISA)

(9)

Analyzing immune status

(10)

Identifying viruses with PCR

(7)

Detecting antibodies with ELISA

(8)

Performing virus isolation from embryonate eggs

(4)

Performing serologic testing with hemagglutination inhibition

(5)

Performing serologic tests with complement fixation tests

(6)

Performing sick animal sampling, cleaning & sterilizing equipment, making reagents

(2)

Performing serum sampling, cleaning tools, making reagents

(3)

Explaining about the procedures for virus and laboratory examination

(1)
INSTRUCTIONAL ANALYSIS

Course: Parasitology Co-assistance
MK Code: BIM502
Study Load: 3 credits
Learning Achievements: After Parasitology Co-assistance, PPDH students are able to diagnose diseases caused by parasites (protozoa, arthropods and helminth), and be able to explain the ways of transmission, pathogenesis, clinical symptoms and their control.

Establish Protozoa Diagnosis

Toxoplasmosis Diagnosis

Blood Protozoa Diagnosis

Digestive Tract Protozoa Diagnosis

Trypanosomiasis, Babesiosis, Theileriosis, Anaplasmosis, Plasmolisisand Haemoproteosis Diagnosis

Cocidiosis Diagnosis in poultry

Balantidiasis, Amoebiasis and Cocidiosis Diagnosis in Mammals

Trichomoniasis Diagnosis in poultry

Infection in mice

Organ examination

Biological test

Blood smears Examination

Performing intestinal scarping

Performing sporulation

Artificial infection in chickens

Fecal Examination

Performing esophageal swabs

Protozoa diagnosis in cattle and poultry

Guidelines of Professional Program in Veterinary Medicine, FKH Unair 2018
Establishing Parasitic Disease Diagnosis

Establishing Arthropods Diagnosis

Identifying mites in dogs, rabbits, and chickens

Identifying flies macroscopically and preserving by pining

Identifying fleas and ticks microscopically and preserving by using permanent slide preparations and staining

Identifying scraped mites and host microscopic examination

Identifying arthropods pad acting as the cause of disease in livestock

Identifying arthropods that act as vectors disease in livestock

Control Analysis

Pathogen Transmission Analysis

Preservation / storage techniques, specimen delivery

Flies, mosquitoes, ticks, mites collecting techniques

Parasitic disease (arthropods) diagnosis in livestock
Establishing Parasitic Disease Diagnosis

Establishing Helminth Disease Diagnosis

- Worm larvae and eggs from grasslands examination
- Performing fecal examination
- Performing fecal examination by floating technique
- Calculating worm eggs per gram feces (TCPGT)
- Conducting sedimentation checks
- Conducting sedimentation fecal examination
- Conducting native fecal examination
- Identifying worms with and without staining
- Performing gastrointestinal necropsy for poultry, dogs, cats, sheep, and goats

Examining helminth disease in organs other than the digestive tract

Diagnosing helminthiasis in pet and large animal
INSTRUCTIONAL ANALYSIS

Course: Veterinary Public Health Coassistance
MK Code: KMV501
Study Load: 4 credits
Learning: After completing Veterinary Public Health Co-assistance, PPDH students are able to gain insight into epidemiological investigation of disease and have technical skills and knowledge of Veterinary Public Health.

Insights into epidemiological disease investigation and technical skills and knowledge of Veterinary Public Health

- Milk Health Co-assistance
- Meat Health Co-assistance
- Epidemiologic & Zoonotic Co-assistance
- Animal Health Administration Co-assistance

Making referrals and conducting group discussions regarding milk health and dairy products

- Practicing measuring milk and protein levels by applying:
  1. Kjeldhal / Markhamh Steel method
  2. Formol test method
  3. Spectrophotometry method

Performing bacteriological milk examination:
1. Koch test (total plate count)
2. MPN test (most probably number)

Performing milk laboratory examination (alcohol test, density, acid degree, fat level, lactose level, enzymatic test)

Conducting milk forgery examination (water addition, cooked milk, starch / rice, preservatives)

Performing routine examination (organoleptis) on milk (color, smell, taste, consistency and cleanliness test)

Preparing fresh milk and processed products sampling. Sterilizing and cleaning the tools and rooms. Making reagents and media

Guidelines of Professional Program in Veterinary Medicine, FKH Unair 2018
Completing skills and knowledge technical of Veterinary Public Health

Milk Health Co-assistance
Meat Health Co-assistance
Epidemiological & Zoonotic Co-assistance
Animal Health Administration Co-assistance

Performing laboratory and meat inspection:
- Organoleptic examination (color, odor, consistency, marbelling)
- Meat pH measurement
- Decay initiation test (Postma)
- Microbiological examination
- Protein and fat level measurement

Poultry slaughterhouse
Industrial processing for animal products

Attending cattle slaughter activities, meat handling abattoirs including ante mortem and post mortem examinations

Self-preparation on meat health knowledge, abattoirs, slaughter techniques by showing slides about the types of abattoirs and cutting techniques for cattle, pigs and sheep
Creating students’ reasoning and creativity power improvement by making referrals about Zoonosis / Epidemiology and conducting group discussions about proposal project

- Working on case studies of Epizootic (outbreak) disease
- Working on case studies of Enzootic disease investigation
- Demonstrating the use of computers in Epidemiology

- Performing tutorial assignments about the Concepts and Principles of Epidemiology
- Performing tutorial assignments on Sampling Planning and Sample Size
- Performing tutorial assignments on the types of disease investigation studies (longitudinal studies, surveys, cross sectional and cohorts)

Completing skills and knowledge technical of Veterinary Public Health

Milk Health Co-assistance
Meat Health Co-assistance
Epidemiological & Zoonotic Co-assistance
Animal Health Administration Co-assistance
Completing technical skills and knowledge of Veterinary Public Health

- Milk Health Co-assistance
- Meat Health Co-assistance
- Epidemiological & Zoonotic Co-assistance
- Animal Health Administration Co-assistance

- Making a report
- Attending animal health field activities
- Learning the administrative system and organizational structure of the Veterinary Service Office

- Making a report
- Attending livestock inspection and handling activities
- Learning the administrative system and organizational structure of Animal Quarantine Station (Airport (Juanda), Seaport (Tanjung Perak) and Land route (Kedurus))
INSTRUCTIONAL ANALYSIS

Course: Veterinary Reproduction Co-assistance
MK Code: BIR501
Study Load: 4 credits
Learning Achievements: After completing the Veterinary Reproduction Co-assistance, PPDH students are able to explain the reproductive system in husbandry, perform artificial insemination, diagnose pregnancy in husbandry, diagnose reproductive diseases and disorders and perform reproduction techniques correctly.

- Establishing diagnosis and reproduction technology
  - Making a reproduction diagnosis
    - Describing hormonal reproduction
      - Explaining the reproductive cycle. Estrous cycle (Vaginal smear)
      - Making diluter
    - Making frozen semen
    - Performing distocia examination
      - Conducting a semen examination
      - Conducting pregnancy examination
      - Conducting a genital examination of the ovary, uterus
    - Explaining and performing sterility examination
  - Performing reproduction technology
    - Explaining and performing ET
    - Describing the pregnancy process
    - Describing reproduction anatomy and physiology

Guidelines of Professional Program in Veterinary Medicine, FKH Unair 2018
46
INSTRUCTIONAL ANALYSIS

Course: Veterinary Clinics Co-assistance
MK Code: KKH501
Study Load: 6 credits
Learning: After participating in the Veterinary Clinical Co-assistance,
Achievements: PPDH students are able to determine the diagnosis, prognosis and treatment of the diseases in small animals, conduct medical emergency assistance, conduct radiological examinations, perform surgical preparations, understand various surgical techniques in small animals and perform ovariohysterectomy independently well and properly.

After participating in the Veterinary Clinical Co-assistance, PPDH students are able to determine the diagnosis, prognosis and treatment of the diseases in small animals, conduct medical emergency assistance, conduct radiological examinations, perform surgical preparations, understand various surgical techniques in small animals and perform ovariohysterectomy operations independently well and properly.

Establishing diagnosis, prognosis and treatment of small animal diseases
Performing medical emergency assistance
Performing radiological examination
Preparing surgical tools and animals for surgery
Performing anesthesia in small animals
Understanding various surgery in small animals and performing ovariohysterectomy independently

Collecting and analyzing disease history
Performing and analyzing physical examinations
Performing and analyzing laboratory examinations

Entry behaviour: PPDH pathology Co-assistance, microbiology, Parasitology, Pharmacy and Receptors, Veterinary Ethics and Animal Welfare
INSTRUCTIONAL ANALYSIS

Course: Fieldwork Practice
MK Code: KLH501
Study Load: 6 credits
Learning Achievements:

Fieldwork Practice for Large Animals: Capable to manage housing, feed, animal health (including calves to cows). Reproductive health and performing artificial insemination technology in large animals.

Poultry Fieldwork Practice: Capable to vaccinate DOC, manage starter housing up to layers, manage health and poultry feed

Completing skills and technical knowledge about raising production, reproduction and health of poultry and large animals
FIELDWORK PRACTICE (PKL)
LARGE ANIMALS, TEACHINGFARM AND POULTRY

I. INTRODUCTION
1.1. Background
The Agricultural Development especially Animal Husbandry sub-sector basically undergoes complex problems. Therefore, its solutions require integrated and systematic collaborative efforts. In Indonesia, the development of husbandry has recently grown rapidly, resulting in the more complex increasing health problems. This certainly requires the contribution of veterinarians with optimal qualifications in monitoring animal health.

The Faculty of Veterinary Medicine as an educational institution administering Veterinary Education bears responsibility to deal with this challenge. To answer this challenge, the Faculty of Veterinary Medicine must be able to produce professional graduates in their expertise with competence in coping with problems in the field.

Professional Program in Veterinary Medicine at the Faculty of Veterinary Medicine, Universitas Airlangga is founded to produce Veterinarians who:
1. have professional qualification
2. are capable of keeping abreast of developments in veterinary and animal husbandry as well as related disciplines
3. are capable of organizing their knowledge and experience so that they can take a significant part in developing their competences, science and technology in developing animal husbandry in Indonesia.

To achieve the aforementioned objectives of the veterinary qualification, students besides having lectures and practicum must carry out fieldwork practice (PKL) or off campus activity. This fieldwork practice is a required program for students who have completed an undergraduate degree which is at the level of profession education (Co-assistance) due to the fact that the manifestation of the fieldwork practice is the integration of educational activities, research, experience as well as the application of science and technology in delivering community service.

Students are able to obtain many benefits by joining this fieldwork. One of them is developing a more mature perspective in dealing with community development problems, especially related to veterinary medicine and husbandry. Accordingly, this activity is an opportunity to apply the lessons obtained in lectures with the reality in the field.

Community and related institutions (Animal Husbandry Service, Dairy Cooperatives and animal husbandry companies) can take benefit from the students to integrate the appropriate scientific and technological fields in developing programs of a cooperation/village and animal husbandry in general.

In order to perform this fieldwork activity properly and the results can be evaluated, it is necessary to make a Guideline for the Implementation of Fieldwork Practice (PKL) that can be used by the fieldworkers, field advisors, and students.

1.2. The Analysis of Students’ Potential and Needs
To achieve the expected objectives, the potential and needs of students need to be examined. Like common teenagers, students have both positive and negative potential that can be benefited for the success of PKL program. Students of Professional Program in Veterinary Medicine have some positive potential, including:
1. Mastering the theory, knowledge and technology of the veterinary and animal husbandry fields
2. Having adequate experience both in profession, specifically and husbandry, in general, obtained from laboratory practicum, comparative studies, community service and research on thesis.
3. Being in adulthood which means having personal maturity, being experienced in social life and gaining the sense of leadership in organizational life and being aware of self-actualizing. Because of the period of adulthood, students should have maturity in their attitude, deep point of view in living, understanding and organizing their knowledge and experience.
Besides, students also have negative potential, including:

1. Getting easy to judge something wrong or bad if it does not match their belief because in their youth, students tend to have limited experience. So, they are narrow-minded and tend to be a priori and less thoughtful and unwise
2. Having pure idealism and the belief of their idealism is firmly and rigidly maintained
3. Having strong and fervent spirit of life and work
4. Having tendency to actualize themselves and to live in groups which makes students easily be influenced by the will of the group.

Of all the aforementioned potential, students are often influenced by irresponsible objectives. However, within good and responsible direction, students are beneficial development resources.

1.3. Analysis of Student Needs in the Final Semester of Professional Program in Veterinary Medicine

1. The need to actualize themselves (self-actualizing) or manifest themselves (self-manifestation) or the desire to be useful to others through the actual application of knowledge
2. The need to develop abilities, professional abilities in entering veterinary world of work specifically and husbandry in general.
3. The need to mature their personality, especially in preparing themselves to enter the world of working in the veterinary and husbandry fields in accordance with personality needs in the world of work.
4. The need for real recognition of the world of work
5. The need to have added values in facing job competition and career advancement in the veterinary and husbandry fields.

1.4. Analysis of the Demands of the World of Work

The animal husbandry business in Indonesia continues to grow and develop along with the development of the nation. At the same time, the demands of the animal husbandry business to the quality and quantity of veterinary graduates have also increased. In 1970, the husbandry business was mostly only small-scaled where cattle farmers only farmed in a small-scales business, but the scale of the business is now increasing, for about thousands until hundred thousands of cattle. This has led to consequences for the increasing need of both the quality and quantity of veterinary labor. On this large scale, animal husbandry requires veterinarians who have added values.

In the era of free market, veterinarians entering the world of work must certainly have the ability to compete with international veterinarians. This heavy duty is the responsibility of the Faculty of Veterinary Medicine at various universities and institutes in Indonesia.

Professional Program in Veterinary Medicine must adapt to the demands of the world of work, in which veterinarians should master knowledge and practical skills in the veterinary medicine. Knowledge and practical skills can be taught after students master veterinary theories. The right time for students to learn practical knowledge and skills and the application of the theories learned in college is when carrying out fieldwork.

1.5. Analysis of Fieldwork Practice

The Professional Program in Veterinary Medicine must always be refined to suit the development of science and technology and trends in the needs of veterinarian labor, and adapted to the responsibilities of the university as the institution to graduate the veterinary. Thus, the potential of prospective veterinarian students, both the positive and negative ones, needs to be considered.

So far, the Professional Program in Veterinary Medicine has provided sufficient intellectual provision to the students. According to information given by professional veterinarians, the Professional Program in Veterinary Medicine needs to provide more practical knowledge and skills. Therefore, the Professional Program in Veterinary Medicine must be responsive to the tendency and immediately adjust the curriculum.
Considering the responsibility of higher education to produce intellectual human beings including Veterinarians, the program to increase knowledge and practical skills, among others, is fieldwork. This activity has strategic potential by considering students’ potential and needs as well as the demands of the world of work.

1.6. Philosophy and Definition of Fieldwork Practice

1.6.1. Philosophy

Fieldwork practice or off campus activities are integral activities of the teaching and learning process and have special characteristics, namely:

1. The integration of implementation of *Tri Dharma* of Higher Education. Fieldwork practices are integral activities of the higher education system that cannot be separated from the curriculum after Undergraduate Degree, which means that fieldwork serves as a binder and summarizes all the knowledge stated in the curriculum. Fieldwork practice is also a learning experience that connects academic concepts to the reality of life in society, especially cattle farmers.

2. In addition, fieldwork practice also shapes experiences for students in handling cases related to animal husbandry and management as well as increasing the personality of students to be independent.

3. In carrying out fieldwork students do not solely think of one sector, because problems in one area are always related to other sectors (cross-sectorial), then good cooperation with the suitable agencies/institutions must be well established.

4. In the implementation of fieldwork practice, the active involvement of community and officers of the area from the beginning is needed.

1.6.2. Definition of Fieldwork Practice

Fieldwork practice is off campus activity, a form of education by providing learning experiences (practice) to students to live in the midst of communities off-campus and directly identifying and addressing the problems of existing husbandry development.

Fieldwork practice is carried out by the Faculty of Veterinary Medicine, Universitas Airlangga as an effort to improve the content and load of education for students and to obtain greater added values for higher education.

According to the calculation of the semester credit load, 1 credit of fieldwork is equivalent to 170 minutes per week for 1 semester, so the fieldwork of co-assistant students has a load of 6 credits within 10 weeks.

Fieldworks practice for co-assistant students at the Faculty of Veterinary Medicine consists of practice on Large Animals for 2 credits for 4 weeks; practice on Poultry for 2 credits for 4 weeks and practice on Teaching Farm for 2 credits for 2 weeks.

Fieldwork practice is carried out in rural communities aiming to increase the relevance of higher education with the development and the needs of the community for science, technology to conduct increasing development and students’ perceptions of the relevance between the curriculum materials obtained on-campus with the reality of development in society.

1.7. Objectives and Targets of Fieldwork Practice

Fieldwork practice is an intra-curricular activity at the professional level where the implementation takes place in the community and requires the involvement of the community and certain institutions. Thus the implementation in the field must concurrently support the development of cattle in the countryside. It is expected that at the end of the fieldwork, students will have various additional (environmental, functional and professional) knowledge and abilities including various skills as outlined in the objectives of the Fieldworks Practice.

1.7.1. General Objectives

1. Increasing students' understanding of the details of animal husbandry development, management and efforts to prevent, handling and control diseases at the location of Fieldworks.

2. Improving students’ ability in the application of science and technology that is relevant to various aspects of handling cattle and handling various cases of animal diseases.

3. Helping communities, groups of cattle farmers including cattle cooperatives in various aspects of efforts to improve their business.
4. Increasing cooperation between universities and related institutions, especially the Faculty of Veterinary Medicine, Universitas Airlangga and the farming community including local/city governments

1.7.2. Special Objectives
1. Students can define and identify various husbandry problems and cases of animal diseases at the location of the fieldworks.
2. Students can practice theories of handling diseases through examination of anamneses, establishing diagnosis and applying appropriate therapy toward the existing diseases.
3. Students can carefully analyze various husbandry problems faced by the farming communities.
4. Students prepare and practice various technologies (models, systems or methods) that are relevant to the needs of husbandry management and husbandry products as well as handling animal diseases.
5. Students can prepare fieldwork report and advice on efforts to overcome various husbandry problems and cases of diseases, based on systematic and scientific facts (data) and the existing environmental conditions.

1.7.3. Targets
In accordance with the objectives to be achieved, the Fieldwork Practice of Universitas Airlangga has 3 targets, namely Students, Universities and Communities.

Students
1. Training the students to understand and know about:
   a) How to think and work in an interdisciplinary and intersectoral manner
   b) The importance of educational outcomes for national development in general and in particular, development of cattle in rural areas.
   c) Difficulties faced by rural communities in developing husbandry
   d) Overall relationship between the problems of development and the development of rural areas
2. Maturing students’ mind in pragmatically and scientifically examining and solving problems which exist in society
3. Providing skills to students to implement husbandry development programs
4. Fostering students to become innovators and problem solvers
5. Providing experience and skills to students as cadres of development, besides, they are expected to shape attitudes and a sense of responsibility towards the progress of rural communities.
6. Training the students to improve soft skills

Universities
1. Getting feedback from various problems and cases obtained by students, which can be used to improve the relevance of the briefing program, evaluation of the Fieldwork practice and increase or addition of lecture materials and or curriculum
2. Obtaining data and facts about the real condition of animal husbandry development, the disease situation at the location of the Fieldwork Practice
3. Lecturers will get various cases which can be used as further study materials
4. Accelerating and enhancing cooperation between universities as a center for science and technology with relevant agencies in implementing husbandry development.

Communities (Cattle Farmers)
1. Obtaining aid of energy and thought in planning and implementing husbandry development
2. Obtaining needed improvement for husbandry development
3. Forming cadres who will be the successors of the development
II. MANAGEMENT OF FIELDWORKS PRACTICE

2.1. The Managerial Structure

The organizational structure of the Fieldwork Management of the Faculty of Veterinary Medicine, Universitas Airlangga consists of:

1. Person in charge
2. Organizing Coordinator
3. Field Advisor (DPL)
   a) Dairy Village Cooperatives Veterinarian: assignment from Faculty of Veterinary Medicine, Universitas Airlangga
   b) Veterinarian of Faculty of Veterinary Medicine, Universitas Airlangga

2.2. Duties and Responsibilities

2.2.1. Person in charge (Vice Dean I)

1. Being thoroughly responsible for the results of the implementation of fieldwork activities
2. Carrying out the general functions of implementation, organizing, directing, coordination, supervision and control of the implementation of fieldwork
3. Coordinating with outsiders
4. Being responsible to the Dean

2.2.2. Organizing Coordinator

1. Acting as the daily executor and organizer as well as implementer of Fieldwork Practice
2. Implementing policies that have been proposed by the person in charge of the Fieldwork
3. Being responsible to the Vice Dean I

2.2.3. Field Advisor (Dairy Village Cooperatives Veterinarian and Veterinarian of Faculty of Veterinary Medicine Universitas Airlangga)

General

1. Maintaining and fostering students’ discipline in the Fieldwork Practice to carry out their duties responsibly in accordance with applied regulations
2. Guiding students in every operational step in the field
3. Creating an atmosphere for creativity, and encouraging students’ enthusiasm and active involvement
4. Accommodating all of the arising problems and obstacles faced by the students and providing advice and helping how to solve them
5. Assessing students’ activities in determining the achievement of students’ success on the Fieldwork Practice

Special

a. Dairy Village Cooperatives Veterinarian

1. Providing guidance to students regarding the conditions and situations in the implementation area of the Fieldwork, the map of animal diseases and husbandry of associated regions and everything related to the fieldwork activities.
2. Accompanying students in field orientation, identifying problems in the field
3. Accompanying and guiding students in every activity
4. Becoming a liaison between the students and the Dairy Village Cooperatives or related local institutions
5. Along with the Veterinarian of the Faculty of Veterinary Medicine, Universitas Airlangga, guiding students in writing reports.
b. Veterinarian, Faculty of Veterinary Medicine, Universitas Airlangga
1. Attending the first meeting at the Faculty of Veterinary Medicine, Universitas Airlangga before the students visit the field
2. Accompanying students in the orientation to the field, identifying problems in the field
3. Accompanying students at the time of students’ departure
4. Representing the Head of the Faculty of Veterinary Medicine, Universitas Airlangga, to handover the students to the local Dairy Village Cooperatives management and the head of poultry farms
5. Along with Dairy Village Cooperatives Veterinarians and farm leaders, guiding students in writing reports

2.3. The Organizational Structure of Fieldwork of Faculty of Veterinary Medicine, Universitas Airlangga

III. IMPLEMENTATION OF FIELDWORK PRACTICE
3.1. Preparation
1. Approaching the heads of the institutions (FVM – Animal Health Center/Dairy Village Cooperatives/Head of Animal Husbandry and Regional/City Government). The concept of thought or regulations of the fieldwork can be informed to all related parties in a meeting
2. Designing an agreement approved by all parties, based on the desired objectives and their benefits as well as targets for all parties
3. Creating a small committee at the Faculty of Veterinary Medicine, Universitas Airlangga, which is coordinated by the Vice Dean I to handle the implementation of the Fieldwork Practice, with the following tasks:
   a) Conducting field observations, in order to collect various facts and information needed to develop work plans
b) Arranging briefing material, as well as delivering briefing for students who will carry out the fieldwork practice

c) Preparing Field Advisors (DPL) assigned in the location of the fieldwork

d) Periodically approaching the Head of Animal Health Center/Dairy Village Cooperatives/Animal Husbandry and the Regional/City Governments and associated husbandry communities. Discussing the topics with Dairy Village Cooperatives to evaluate the implementation of students' fieldwork

e) Arranging a work plan for Fieldwork Practice which includes:
   a. schedule arrangement
   b. dissemination of tasks for both students and Field Advisors
   c. honorarium
   d. transportation and accommodation
   e. evaluation

4. Preparing briefing materials which consist of knowledge related to professions, functions or task implementations and social environment.

3.2. Implementation

The implementation of this fieldwork practice is nothing but running a plan that has been structured and discussed with cattle farmers and the related parties. At this stage, it is very important to pay attention to various efforts of social approach to collaborate with the cattle farmers, field officers of the Department of Animal Husbandry, Dairy Village Cooperatives and so on. This stage is the most important part of the fieldwork practice. At this stage students will directly be deployed to the field and face existing cases.

It is necessary to develop an activity plan based on the local situation and condition. The activity plan is prepared by students under the guidance of the Field Advisor from the Faculty of Veterinary Medicine, Universitas Airlangga, and then it is discussed with the Field Advisor from the Dairy Village Cooperatives, if necessary by involving field officers of the Department of Animal Husbandry or other officers. This discussion does not only improve the feasibility of the program, but it is also as a social approach to gain their support and participation as expected. Some things that must be considered in implementing this work program are:
   a. Objectives, benefits, feasibility and flexibility of the plan prepared
   b. The type and nature of activities must be able to arouse the interest of cattle farmers to be independent in managing cattle health and husbandry. So, cattle farmers can immediately find out what to do if there is a health problem.
   c. It is necessary to think about the principle of sustainability if the students return to campus. Thus it is necessary to create a lasting relation with the local farmers so that they continue the program.

Student Activities

1. Dealing with cases of cattle and pet diseases by visiting cattle farmers, based on incoming reports and making necessary records

2. Having discussions and consultations on various cases of existing diseases and cattle problems with the local Veterinarians and Field Advisors

3. Providing guidance and direction on how to raise good cattle such as: preparation of feed, feeding, maintenance and care (calves, young cattle, cows, bulls), housing, sanitation, milking, and others. Guidance can be given individually or in groups (by holding counseling)

4. Monitoring and recording the production and quality of cow’s milk (if necessary)

5. Having discussions and consultations with cooperative leaders/cooperative veterinarians and cattle farmers and seeking information about the development of the cattle and their problems.

6. Students are required to make fieldwork reports consisting of group reports and individual reports. Group report is submitted not more than 2 weeks after the Professional program ends and the report is collected to the Fieldwork Practice Coordinator. Individual report is collected to the Fieldwork Practice coordinator for scheduling The Fieldwork Exam.

7. Following the evaluation.
3.3. Evaluation

Considering fieldwork as a required intracurricular subject for Professional Program in Veterinary Medicine, the evaluation or assessment is an activity that cannot be abandoned. The purpose of the evaluation is to determine the success level of the implementation of the overall Fieldworks Practice. There are two types of evaluations:

3.3.1. Student Achievement Evaluation

Elements evaluated:

1. Attendance
   Being absent more than 4 (four) days is considered failed. Every absence must be completed by an approval letter by the Dean of the Faculty
2. Mastery of material, cooperation and activities include:
   Evaluation of success or changes that have been achieved by the students (cognitive, affective, and psychomotor aspects)
3. Organizing group reports consists of:
   a. Front cover
   b. Approval sheet by the Fieldwork Practice Coordinator
   c. Background
   d. Problems
   e. Problem solving plan
   f. Implementation
   g. Discussion
   h. Conclusions and recommendations
   i. Appendices
4. Organizing Individual Reports consists of:
   a. Front cover
   b. Time of Fieldwork Practice Implementation
   c. Daily activities
   d. Discussion
   e. Conclusions and recommendations
5. Lateness of report submission by the students results in their inability of doing the Fieldwork exam.

The loading consists of:

<table>
<thead>
<tr>
<th>Loading</th>
<th>Percentage</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field activities (discipline, cooperation, activity)</td>
<td>40 %</td>
<td>Graded by the Field Advisor</td>
</tr>
<tr>
<td>Report</td>
<td>20 %</td>
<td>Fieldwork Coordinator</td>
</tr>
<tr>
<td>Exam</td>
<td>40 %</td>
<td>The examiners consist of Field Advisor and appointed examiner lecturers</td>
</tr>
</tbody>
</table>

3.3.2. The Overall Evaluation of Fieldwork Practice

This evaluation is needed to develop policies and technical improvements (systems) in implementing fieldwork. The results will be reported to the Dean of the Faculty of Veterinary Medicine, Universitas Airlangga through the Vice Dean I.

3.4. Students’ Code of Conduct of Fieldwork Practice

The subsequent code of conduct must carefully be followed by the students of the Faculty of Veterinary Medicine, Universitas Airlangga in the drop-off area of the Fieldwork. Any violation in the field results in academic sanctions in the form of warnings or the students will be withdrawn from fieldwork area and declared failed if there is a high-level violation, for example the number of absence exceeds the limit, doing an activity off the provisions, etc. The code of conduct is as follows:
1. Students in the Fieldwork before working in the area must be familiar with local condition by means of a preliminary survey and existing data.
2. Students in the Fieldwork are required to bring a two-wheeled vehicle while working in the field, at least 1 motorcycle for 2 people.
3. Students are required to submit and show assignment letters brought from the Faculty given to the Sub-District Head, the Department of Animal Husbandry, the Head of Dairy Village Cooperatives, the Village Chief and the local Veterinarian.
4. Students must maintain the prestige of the alma mater, maintain harmonious relations with the apparatus and farmers in the area of the Fieldwork practice, maintain both manners and behaviors that reflect the students' personality.
5. Students are not allowed to carry out non-academic activities.
6. During the Fieldwork practice, students are not allowed to carry out other academic activities such as lectures, tutorials and examinations without written permission from the Dean.
7. Students of the Fieldwork practice must consult all problems to the Field Advisor.
8. Students must maintain and foster discipline to responsibly carry out tasks in accordance with applied regulations.
9. To be absence more than 4 days, students are declared failed.
10. Every absence must be completed by a doctor’s letter approved by the Dean of the Faculty. Every absence in the field must have a doctor's letter or information that is authorized by the Dean of the Faculty.
11. It is not justified to receive or withdraw services or money from patients/farmers of the treatment during the on-going fieldwork practice.
12. It is not justified to inform a decision to do a therapy in the Fieldwork Practice without consent of the Field Advisor, the local Veterinarian and the Paramedics as well as the Inseminator.
13. The Fieldwork Report must be submitted to the Faculty not more than 15 days after the students leave the Fieldwork Practice completed by the signature of the Head of the Dairy Village Cooperatives, the Field Advisor and the local Veterinarian.
14. Local Veterinarians, head of Dairy Village Cooperatives and Field Advisor are fully authorized to give the assessments to the students.
15. Reports are written individually.