Course Title	Swine Clinical Laboratory Practice

Type	Exercise, Elective	Number of credits	3	Hours	-

Course Instructor	Prof. Dr. Rungroje Thanawongnuwech Prof. Dr. Sanipa Suradhat Prof. Dr. Padet Tummarak Assoc. Prof. Dr. Kanisak Oraveerakul Assoc. Prof. Dr. Nopadol Pirarat Assoc. Prof. Dr. Sonthaya Tiawsirisup Assoc. Prof. Dr. Wijit Bunlunara Assoc. Prof. Dr. Teerayut Kaewamatawong Assoc. Prof. Dr. Nuvee Prapasarakul Assist. Prof. Dr. Komkrich Teankum (Course coordinator) Assist. Prof. Dr. Sumitr Durongpongthorn Assist. Prof. Dr. Woraporn Sukhumavasi Instructor Dr. Pornchalit Assavacheep Instructor Dr. Suphot Wattanaphansak Instructor Rachod Tantilertcharoen

Course Overview:
Clinical laboratory practice in medicine, surgery, obstetrics, pathology, and diagnostic techniques in swine.

Course Goals:

1. To learn and practice necropsy, sample collection and handling with emphasis in swine.
2. To understand the pathological diagnosis and other techniques
3. To understand the concept and interpretation with application of immunological and serological techniques in swine
4. To understand the concepts of microbiological techniques used in disease diagnosis with emphasis on important infectious disease in swine for further treatment, control and prevention plan.

Course Schedule: (3 weeks)

1. Necropsy technique
   Students learn the necropsy techniques, samples collection and handling, report writing and presentation. (The student will perform the necropsy under the supervision, collect samples for further analysis, write the report and present.)
2. Basic and Practical Immunology
3. Swine Parasitology Diagnosis
4. Virology practice and Microbiology practice
5. Swine gross pathology and Swine GI pathology
6. PCVAD diagnostic pathology and Slaughter check
7. Veterinary diagnostic laboratory
8. Pathology diagnostic methods
9. Serology interpretation: basic and application
10. Swine respiratory bacterial diseases
11. Principal of drug use in pigs farm
12. Application of laboratory data for swine health management
13. Swine anesthesia and surgery
14. Swine reproductive disorders in female
15. Pathology of boar
16. Clinico-pathological case discussion

Remarks:

Course Title	Swine Clinical Practice II

Type	Exercise, Elective	Number of credits	2	Hours	-

Course Instructor	Prof. Dr. Mongkol Techakumpu Assoc. Prof. Dr. Wichai Tantasuparuk Instructor Dr. Pornchalit Assavacheep Instructor Dr. Suphot Wattanaphansak (Course coordinator)

Course Overview:

Field practice of veterinary skills to control and prevent infectious, noninfectious and the epidemic diseases of swine; problem solving by the knowledge in epidemiology, preventive medicine, disease investigation, surveillance and eradication; advanced training and practice in swine farm and swine clinic at livestock hospital.

Course Goals:

1. To understand the concept and the role of veterinarian in standard pig farm to control and prevent diseases

Course Schedule: (2 weeks)

1. General swine farm management
   Basic skill for control and prevent infectious, noninfectious and the epidemic diseases of swine; learning through commercial standard pig farm.
2. Reproductive management
   Troubleshooting in boar stud, AI lab and service facilities
   Troubleshooting in farrowing facilities
   Troubleshooting in gestation, gilt pool and nursery facilities
   Swine fertility clinic: service under livestock hospital

Remarks:

Course Title	Equine Clinical Practice

Type	Exercise, Elective	Number of credits	1	Hours	-
Course Instructor	Assist. Prof. Dr. Voraphan na Songkhla (Course coordinator) Assist. Prof. Dr. Theerawat Tharasanit				

Course Overview:

Clinical practice in examination, diagnosis and treatment of equine medicine, surgery and obstetrics

Course Goals:

1. To learn and practice basic clinical examination in horse
2. To learn and practice basic surgical and anesthetic methods in horse
3. To learn, practice and perform basic reproductive examination

Course Schedule: (1 week)

1. Equine obstetrics
   Practice on reproductive examination in horse (per rectal examination), castration and/or spaying demonstration
   Laboratory techniques involved with equine reproductive practice
2. Equine general medicine
   Practice on basic clinical examination in horse including nasogastric tubing, blood collection and etc.
   Laboratory techniques involved with hematological method, antitoxin production and etc.
3. To practice basic surgical and anesthetic methods in horse
   Practice and perform clinical examination in relation to surgical problems including lameness
   Practice on basic local (and spinal nerve block) and general anesthesia in horse

Remarks:

Course Title	Wildlife and Exotic Animal Health Management

Type	Exercise, Elective	Number of credits	2	Hours	-
Course Instructor	Instructor Dr. Paweena Thuwanut (Course coordinator)				

Course Overview:

Basic of biology of wild, zoo and exotic animals; principles of raising and managing these animals; common diseases and zoonotic diseases; related laws, regulations, ethics and animal welfare; preventive medicine and health management of wildlife animals, including conservation of wild animals in nature and new habitat.

Course Goals:

1. Understand the veterinary role in zoo and wildlife conservatory
2. Understand the difference between the treatment of exotic/ zoo animals and wild animals and able to apply the basic veterinarian techniques on exotic/ zoo animals and wild animals treatments and management
3. Learn and know how to diagnose and treat general diseases including bacterial infection, parasitic infection, wound and nutritional problems in exotic/ zoo animals and wild animals

Course Schedule: (2 weeks)

1. General medicine
   Practice on basic clinical examination in exotic/ zoo animals or wild animals
2. General zoo management
   Observe and practice in zoo or elephant conservatory

Remarks:

Course Title	Poultry Clinical Field Practice

Type	Exercise, Elective	Number of credits	2	Hours	-
Course Instructor	Prof. Dr. Jiroj Sasipreeyajan (Course coordinator)				

Course Overview:

Clinical field practice in poultry health management: husbandry, hygiene, diagnosis, treatment, control and prevention of diseases.

Course Goals:

1. Understand the health management: husbandry, hygiene, diagnosis, treatment, control and prevention of diseases in standard commercial poultry farm

Course Schedule: (2 weeks)

1. General poultry farm management
2. General hatchery management
   Observe and practice in standard commercial poultry farm

Remarks:

Course Title	Ruminant Clinical Field Practice

Type	Exercise, Elective	Number of credits	2	Hours	-
Course Instructor	Prof. Somchai Chanpongsang Assoc. Prof. Dr. Kittisak Ajariyakhajorn Assist. Prof. Chatree Khatiworavage Assist. Prof. Dr. Chaidate Inchaisri Assist. Prof. Thanasak Boonserm (Course coordinator) Assist. Prof. Dr. Siriwat Suadsong Instructor Dr. Nawapen Phutikanit Instructor Dr. Theerawat Swangchan-uthai Instructor Piyanat Prasomsri				

Course Overview:
Clinical field practice in diagnosis, medical, surgical, and reproductive treatments of ruminants; evaluation of herd health status and diseases; report on disease cases and farm visit.

Course Goals:

1. Understand and perform the basic clinical examination in dairy cattle for disease prevention and control
2. Understand and perform the basic surgical methods in ruminant
3. Understand the general health management in calve and heifer for dairy cow replacement plan
4. Understand the dairy product management from milking process, milk production and standard quality control (on site) to reach standard quality and consumer health
5. Understand the basic knowledge of milking system; in order to relate to possible health problem in cow and/or milk quality
6. Understand the importance of lameness on cattle health and milk production; and know the process for problem evaluating for causes, treatment and prevention of leg and foot problem in herd
7. Understand the importance of nutritional management in dairy farm, including feed evaluation, feed sampling for basic nutritional analysis
8. Learn how to work as a team, with planning skill, data collection and evaluation, and presentation
9. Learn and able to apply the veterinarian knowledge in standard dairy farm practice

Course Schedule: (2 weeks)

1. Introduction to Dairy farm management: general production line and general health practice
2. Calve health management, colostrums and heifer replacement plan
3. Practice in milk production analysis; diagnosis and treatment of mastitis; and analysis of raw milk on site
4. Practice on laboratory techniques for milk quality analysis and be able to correctly interpret the data
5. Perform the checking of milking system and milking process
6. Perform, practice and evaluate the leg and hoof problems in herd including hoof dressing practice
7. Evaluate the nutritional value of food and feed additive
8. Practice on reproductive examination and gestation evaluation
9. Perform evaluation on farm reproductive performance
10. Practice and observe a surgical method for making bull teaser
11. Practice as a team and brainstorming for effective dairy farm management
12. Visit and practice in standard commercial dairy farm
13. Case study/ Term paper presentation

Remarks: