

Course Contents

VM 102 Veterinary Ethics (1H: 1T, 0P)

This is an interdisciplinary seminar in ethics to familiarize the students with updated veterinary ethics and laws as they pertain to a professional practice. The presented topics should cover a wide range of areas in bioethics, business and professional ethics, and ethics of technology

VM 104 Animal Husbandry (3H: 2T, 3P)

Different methods of handling and controlling domestic animals such as cows, sheep, goats, horses and camels in addition to small animals (dogs and cats) are discussed. The course also covers the identification of different anatomical body regions. Besides, the students will be introduced to methods of writing short essays and reports related to issues and problems in animal husbandry. The students will be evaluated partially on their writing performance.

VM 106 Animal Welfare (2H: 2T, 0P)

This is an interdisciplinary seminar in ethics to familiarize the students with updated veterinary ethics and laws as they pertain to a professional practice. The presented topics should cover a wide range of areas in animal welfare, bioethics, business and professional ethics, and ethics and technology.

VM 112 Veterinary Anatomy 1 (1H: 1T, 0P)

Study of structural, functional, and topographical anatomy of carnivores, horse, and ruminants and clinical application of gross anatomy.

Pre-request course(s): BIO103

VM 114 Veterinary Anatomy practical I (2H: 0T, 6P)

This course covers embalming of animals including bone preparation for study, osteology, arthrology, myology and cardiovascular systems of different domestic animals. Additionally, the innervation of thoracic, pelvic limbs of the horse, the peritoneum with its reflection and all parts of the digestive system are discussed.

Co-request course(s): VM112

VM 205 Animal Breeding and Genetics (2H: 2T, 0P)

This course will discuss the fundamentals of basic genetics (cell cycle, chromosome and gene structure, and modifications of classical genetic) and how they are applied in animal breeding to improve livestock animals. The course will also cover population, quantitative, and qualitative genetics. The two main tools of animal breeding (selection and mating) to obtain genetically-improved animals will be discussed.

Pre-request course(s): VM 104

VM 215 Veterinary Anatomy practical 2 (2H: 0T, 6P)

This course covers the pleura and its reflection, respiratory, urinary, male and female genital in addition to the anatomy of nervous system, lymphatic, eye and hoof. Also a brief description of poultry anatomy is described.

Pre-request course(s): VM 114

VM 217 Veterinary Histology (2H: 2T, 0P)

An introductory course in animal histology and microscopic anatomy of organs. For the most part, it will deal with cells and tissues from mammals. This course is intended to give you enough experience to be able to identify normal tissues from different organs prepared by standard methods for light microscopy.

Pre-request course(s): BIO103

VM 218 Developmental Veterinary Anatomy (1H: 1T, 0P)

Teaches the students the normal embryological sequence of events and embryogenesis and to familiarize them with the basis for understanding animal development. This course covers embryonic development for different animal organs starting from fertilization to implantation inside the uterus.

Pre-request course(s): VM 217

VM 219 Veterinary Histology practical (1H: 0T, 3P)

This course covers glass slide preparation, methods of study by light microscope, different intracellular structures such as epithelium, glands, C.T., muscular, nervous, and all animal systems of different domestic animals. Furthermore, electron microscopy photographs, desmosomes and cell to cell pictures

Co-request course(s): VM217

VM 221 Animal Physiology 1 (3H: 3T, 0P)

This is a general physiology course in which the major organ systems are described. In this course the nervous system, cardiovascular system, blood components and digestive system are discussed.

Pre-request course(s): VM 112

VM 222 Animal Physiology 2 (2H: 2T, 0P)

This is a continuation of general physiology course in which the major organ systems are described. In this course the renal system, Respiratory system, endocrinology and reproductive system are discussed.

Pre-request course(s): VM 221

VM 224 Animal Physiology Laboratory (1H: 0T, 2P)

Through out this laboratory practical session, the students will be introduced to a number of techniques commonly used in medicine

Co-request course(s): VM 222

VM 225 Veterinary Immunology (3H: 3T, 0P)

This course includes an overview of the fundamental concepts of immunology. The interaction between the host and microbial pathogens, mechanisms that underline hypersensitivity reactions, autoimmune disease and immune deficiency are included. In addition, it provides students with knowledge to perform different serological techniques used in disease diagnosis.

Pre -request course(s): BIO 103, CHEM 112

VM 230 Veterinary Virology (3H: 3T, 0P)

This course covers general virology, systemic virology. The general virology includes virus evaluation, host range, and virus classification. The systemic virology includes important viral diseases of cattle, sheep, goats, equine, poultry, feline and canine.

Pre-request course(s): VM 225

VM 231 Veterinary Bacteriology (2H: 2T, 0P)

This course deals with the structure, physiology, growth, nutrition classification of microbes, their mode of infection, virulence, and hosts with emphasis on veterinary health aspects.

Pre-request course(s): BIO 103

VM 232 Systematic Bacteriology and Mycology (3H: 3T, 0P)

The course deals with the study of different groups of aerobic and anaerobic bacteria, spirochetes, mycoplasmas, chlamydia, fungi, yeast and mold, with the emphasis on their methods of classification, virulence and distribution in different animals species.

Pre-request course(s): VM 231

VM 234 Veterinary Microbiological Techniques (1H: 0T, 2P)

This course covers principles of microbiology process in terms of the use of the microscope and different ways to bacterial staining, and determine its types and methods of preparation media and methods of sterilization and the use of disinfectants, and biochemical tests and examination of sensitivity to antibiotics, to be applied in the study of gram positive and negative bacteria as well as anaerobic bacterial cultures.

Co-request course(s): VM 232

VM 235 Entomology (2H: 2T, 0P)

This course covers external parasites especially ticks, in addition to classification of parasites, epidemiology, and methods of tick control.

Pre-request course(s): BIO103

VM 236 Veterinary Parasitology (2H: 2T, 0P)

This course includes general aspects of parasitic infection in different animals in addition to classification, description of external features of parasites, internal parasites, molecular infection and epidemiology of parasitic infections.

Pre-request course(s): VM 235

VM 238 Entomology and Veterinary Parasitology Lab (1H: 0T, 2P)

This course allows students to practice sample collection, preparation and evaluation of samples for parasitologic examination. Laboratory sessions will include techniques for identifying intestinal, blood and external parasites.

Co-request course(s): VM 236

VM 321 Animal Nutrition (2H: 2T, 0P)

This course will discuss the fundamentals of animal nutrition including: feedstuffs and their use in livestock feeding, nutrients and how they are digested, absorbed, and metabolized by ruminants and monogastrics. Additionally, nutrient requirements, diet formulation, and feeding management of livestock animals will be covered. Finally, nutritional (deficiency and toxicity) and metabolic disorders will be studied.

Pre-request course(s): VM 104, VM 224

VM 341 General Veterinary Pharmacology (3H: 3T, 0P)

This course deals with the principles of drug action, including pharmacokinetics, mode of action, drug interactions, major side effects and important drug toxicities. Emphasis is placed on the general principles of drugs that alter tissue and system functions and antimicrobial and antiparasitic drugs.

Pre-request course(s): VM 224

VM 342 Pharmacology and Therapeutics (2H: 2T, 0P)

Covers aspects of the study of drugs with concentration on the scientific aspects of the pharmacology of neurohumoral transmission, mathematics of pharmacology, cardiovascular and clinical pharmacology, and to a lesser extent on the pharmacology of various organs and tissues.

Pre-request course(s): VM 341

VM 351 General Veterinary Pathology (3H: 3T, 0P)

This course will introduce basic concepts of pathology to veterinary medical students in terms of tissue, organ, body & especially cellular response to various stimuli. This course will focus on cellular adaptation to injury, circulatory disturbances, necrosis, and inflammation, wound healing, and Neoplasia.

Pre-request course(s): VM225, VM234

VM 352 Special Veterinary Pathology (3H: 3T, 0P)

This course will expose the student to the theoretical background of pathological conditions of different body systems of different animal species. Some major diseases of each system will be covered in more details and their pathological changes will be emphasized. Differential pathological diagnosis will be also presented.

Pre-request course(s): VM3 51

VM 353 General Veterinary Pathology lab (1H: 0T, 3P)

This Laboratory section will illustrate basic mechanisms of disease that have been taught in the general pathology course. Each single laboratory will consist of a series of images and/ or glass slides demonstrating gross and histopathological findings. A short description and morphologic diagnosis will be provided for each image or glass slide.

Co-request course(s): VM3 51

VM 354 Special Veterinary Pathology lab (1H: 0T, 3P)

This course will expose the student to different disease conditions of different systems. Emphasis will be given to lesion description and morphologic diagnosis and in some cases disease diagnosis.

Co-request course(s): VM 352

VM 355 Hematology (1H: 1T, 0P)

This course will cover core information for all professional veterinary students on the pathogenesis, diagnosis of the important disorders of the hemic and lymphatic systems in dogs, cats, horses, cattle, sheep and goats and Avian species.

Pre-request course(s): VM 224 VM 225

VM 356 Veterinary Biostatistics (1H: 1T, 0P)

This course will concentrate on the skill of collecting, classifying, summarizing and presenting data related to animal production and diseases. It also teaches applying essential statistical analysis tests to compare the mean and the rate of two populations. The software SPSS statistical package will be used in statistical problem solving.

VM 357 Hematopathology Laboratory (1H: 0T, 2P)

This course will focus on using microscopic glass slides to understand and interpret hematologic results obtained from abnormal different animal species.

Co-request course(s): VM3 55

VM 361 Milk Hygiene (2H: 2T, 0P)

This course will focus on a coherent and critical understanding, application of the theory, research methodologies and techniques relevant to all aspects of milk hygiene. Key issues discussed include; Milk constituent and quality, apply milk

hygiene at all stages of the production chain , understand food safety systems associated with milk production, pre-harvesting, harvesting and post-harvesting aspects of milk production, application of HACCP relating to the specific activities of milk production, prevention and control of chemical residues in milk, including veterinary drug residues and appropriate national and international legislation and prevention and control of zoonoses and other diseases transmitted by milk, or other dairy milk products.

Pre-request course(s): VM 234

VM 362 Meat Hygiene (2H: 2T, 0P)

This course will provide participants with knowledge and comprehension on: the principles and element of meat hygiene to produce safe and suitable meat, apply meat hygiene at all stages of the production chain , construction and layout of abattoir, animal welfare and evaluation of existing transport, slaughter and dressing practices, legislation covering the production of fresh meat for human consumption necessary to optimize public health ,HACCP system and microbiological criteria application in meat industry ,principles of meat inspection and judgment on pathological conditions and meat processing.

Pre-request course(s): VM 353

VM 363 Poultry Management (2H: 2T, 0P)

This course will provide basic knowledge on the structure of the poultry industry, sound management of different poultry enterprises: breeder, layer, broiler flocks, and hatcheries. It also covers the poultry house design, drinking and feeding systems, sanitation, disinfection, and vaccination. The role of biosecurity in disease prevention is emphasized.

Pre-request course(s): VM104

VM 372 General Veterinary Internal Medicine (1H: 1T, 0P)

This course aims to teach students the skills of clinical diagnosis for both the individuals and the herds. It also aims to understand the general systemic status of animals, such as, pain, stress, toxemia, fever, septicemia, sudden death, body fluid and electrolytes disturbances, acid-base balance, allergies, appetite disturbances, poor growth, immune deficiency disorders and neonatal diseases.

Pre-request course(s): VM3 53, VM 357

VM 374 Case History and Physical Examination (1H: 0T, 3P)

Introductory to clinical sciences, the aim of this course is to teach the students the skills and arts of receiving the sick animals and taking the case history of admitted animals, also to train them on the different clinical skills. This course aimed to bridge the knowledge between the basic and clinical sciences.

Co-request course(s):_VM 372

VM 376 Production Medicine (1H: 1T, 0P)

This course will focus on production animal agriculture and the veterinarian's present and future role in these enterprises. Cattle production is emphasized. Cattle production, economics, disease prevention and health programs will be discussed.

Pre-request course(s): VM 321

VM 430 Applied Veterinary Sciences and Diagnostic Laboratories (5H: 0T, 10P)

The student will be trained in Veterinary Laboratory topics related to bacteriology, parasitology, Immunology and Virology applied diagnostic techniques. Students will be assigned to execute experimental projects related to veterinary laboratory diagnostics and will learn the general approaches of planning and executing scientific investigations. In addition The students are expected to gain practical experience and skills on bioavailability and pharmacokinetics study as well as utilizing different methods to measure drug concentration. The students will also obtain direct experience in observations of physiological phenomena. The student will conduct studies under the instructor's supervision and learn reporting procedure related to pharmacological and physiological topics.

Pre-request course(s): VM230, VM.234, VM238, VM 342

VM 432 Veterinary Infectious Diseases (3H: 3T, 0P)

This course covers the most important infectious diseases that affect bovine, equine, ovine, caprine, and porcine. In addition, Small animals (dogs and cats) diseases will be covered. Students will learn how to identify infected animals and how manage cases with infectious diseases.

Pre-request course(s): VM 430

VM 441 Veterinary Toxicology (2H: 2T, 0P)

This course deals with pharmacological and pathological features of diseases caused by common toxic chemicals, plants and poisons of animal origin with emphasis on clinical manifestations, diagnosis, prevention and treatment.

Pre-request course(s): VM 430

VM 460 Animal Food products Inspection and Sanitation (1H: 0T, 3P)

This course will teach the students practical sessions in cattle, sheep, goat and poultry ante-mortem inspection. The course will also teaches practically the veterinary-sanitary examination of carcasses and internal organs that includes healthy carcasses, local and general pathological changes, and infected carcasses with bacterial, viral and parasitic diseases. The course will also teach the standard sanitation operating procedure and HACCP plans of slaughtering facilities.

Pre-request course(s): VM3 61, VM 362

VM 461 Poultry Diseases (3H: 3T, 0P)

This course will discuss poultry (mainly chickens) diseases. Specific details about each disease will be explained including etiology, transmission, clinical signs, gross lesions, samples to be collected, diagnostic tests, treatment, vaccination, prevention and control strategies.

Pre-request course(s): VM 363

VM 471 Food Animal Medicine (2H: 2T, 0P)

This course covers most common diseases of food animals includes; cattle, sheep, goats, swine and camels. The students will learn about etiology, methods of diagnosis, treatment and prevention of these diseases. This course will emphasize also on pointing out the differences between the animal species in term of the general systemic status and clinical approaches for the diagnosis of the diseases.

Pre-request course(s): VM 374

VM 481 General Veterinary Surgery (2H: 2T, 0P)

The basic principles of modern veterinary surgery including asepsis, wound healing and management, suturing patterns, suture materials, and patient management in the peri-operative period will be presented.

Pre-request course(s): VM 2 15, VM 374

VM 482 Small Animal Medicine and Surgery (2H: 2T, 0P)

This course will provide the students with core knowledge of pathophysiological changes, diagnostic procedures, treatment and prognosis of medical and surgical conditions of dogs and cats.

Pre-request course(s): VM 481

VM 483 General Veterinary Surgery practical (1H: 0T, 3P)

This is a practical course includes the discussion and practice of specific surgical techniques in food animals and horses.

Co-request course(s):_VM 4 81

VM 484 Small Animal Surgery lab (1H: 0T, 3P)

This course will provide students the necessary training in preoperative planning, anesthesia, surgical principles and techniques, operating room decision-making, and postoperative care via supervised operations designed to parallel the most commonly performed elective and advanced surgical procedure in private practice.

Co-request course(s): VM 482

VM 486 Veterinary Anesthesiology (1H: 0T, 3P)

It covers basic and new trends in the field of veterinary anesthesia with emphasis on local analgesia, regional analgesia, general anesthesia and emergency medications.

Pre-request course(s): VM 483

VM 488 Veterinary Diagnostic Imaging (1H: 0T, 2P)

The course will cover in details the principles of radiography, including the various potential hazards of radiation. Radiographic imaging techniques utilized in large and small animals along with other imaging methods such as ultrasonography, CT, and MRI will be discussed. The course will focus on proper interpretation of radiographs and ultrasonographic images.

Pre-request course(s): VM 483

VM 491 Food Animal Theriogenology (2H: 2T, 0P)

This course covers the physiology and pathology of female reproductive systems in swine, cattle and small ruminants. This course is divided into two major parts: the first part deals with gynecological aspects of the non pregnant female, fertility monitoring and control programs; in the second part, normal and abnormal pregnancy, parturition and postpartum period will be covered.

Pre-request course(s): VM 354, VM 374

VM 493 Canine and Feline Theriogenology (2H: 1T, 2P)

This course covers the physiology and pathology of female reproductive systems in dogs and cats. This course is divided into two major parts: the first part deals with gynecological aspects of the non pregnant female, fertility monitoring and control of reproduction; in the second part, normal and abnormal pregnancy, parturition and postpartum period will be covered.

Pre-request course(s): VM 354

VM 495 Equine Theriogenology (1H: 1T, 0P)

This course covers the physiology and pathology of female reproductive systems in horse. This course is divided into two major parts: the first part deals with gynecological aspects of the non pregnant female, fertility monitoring and control schemes; in the second part, normal and abnormal pregnancy, parturition and postpartum period will be covered.

Pre-request course(s): VM 354

VM 496 Diagnostic Techniques in Animal Reproduction (2H: 0T, 6P)

In this practical course, students will explore the clinical practice of veterinary gynecology and reproductive diagnostic techniques used in ruminants and horses.

Pre-request course(s): VM 491 VM 495

VM 498 Veterinary Obstetrics practical (1H: 0T, 2P)

Management of obstetrical cases and fetotomy in veterinary practice will be covered in this practical course.

Pre-request course(s): VM 491 VM 495

VM 530 Veterinary Infectious diseases Clinic (1H: 0T, 2P)

This is a clinical rotation where students learn and handle real cases of infectious diseases. Students will practice logical approaches to reach definitive diagnosis and treatment strategies.

Pre-request course(s): VM 432

VM 531 Zoonotic Diseases (2H: 2T, 0P)

This course covers the most important zoonotic diseases that represent threat to humans (animal health providers, farmers, animal owners and food animal consumers). Issues related to biosecurity and self-protection will be discussed.

Pre-request course(s): VM5 30

VM 532 Infectious Diseases and Herd Health clinic (1H: 0T, 3P)

In this course students will be exposed to herd problems and management of herd problems related to infectious diseases. Students will have hand experience on data and sample collection, analysis, and logical analysis.

Pre-request course(s): VM5 30

VM 550 Veterinary Pathology Clinic 1 (1H: 0T, 2P)

This course will focus on clinical chemistry, hematology and cytological cases of diseased animal and how to perform detailed necropsy on dead animals and describe gross lesions using scientific terminology and how could the student translate these information into a scientific pathology report

Pre-request course(s): VM 354

VM 551 Veterinary Post –mortum clinic 1 (1H: 0T, 3P)

In this course the student will learn how to approach a dead animal and how to take the representative tissue samples in order to reach the cause of death.

Pre-request course(s): VM 5 50

VM 552 Veterinary Post –mortum 2 (1H: 0T, 3P)

In this course the student will learn how to describe concisely and anatomically precisely the macroscopic manifestations of disease in organs, tissues, and body cavities and reporting correctly the useful diagnostic findings and appropriate morphologic diagnosis in order to know the direct cause of the insult if possible.

Pre-request course(s): VM 5 51

VM 553 Veterinary Clinical Chemistry and Cytology (2H: 1T, 3P)

This course will focus on understanding the diagnostic and prognostic value of pertinent laboratory tests as aids in the medical management of clinical cases. Interpretation of alterations in cytological samples from various organ systems, and chemical data derived from blood serum or other body fluids is provided. Extensive use is made of clinical cases to emphasize correct interpretation of reports.

Pre-request course(s): VM 352

VM 554 Veterinary clinical Pathology clinic (1H: 0T, 3P)

this course will include small group discussion of topics related to clinical chemistry, hematology and cytological cases in dogs, cats, swine, cattle, sheep and goat and horses.

Pre-request course(s): VM 550 VM 553

VM 560 General Poultry Disease Clinic (1H: 0T, 2P)

The students will learn to performing poultry necropsy and recognizing the lesions, Formulate a differential list of poultry diseases based on the presented clinical or gross signs and recommend treatment.

Pre-request course(s): VM 4 61

VM 561 Poultry Disease Clinic 1 (1H: 0T, 3P)

The students will learn to formulate differential list of poultry disease and will learn what samples to collect and what tests to order. In addition, they will learn disease prevention, management, and treatment options.

Pre-request course(s): VM 560

VM 562 Poultry Diseases Clinic 2 (1H: 0T, 3P)

This course covers skills concerning diagnosis and treatment of diseases in poultry cases referred to the Veterinary Health Center or through field services.

Pre-request course(s): VM 561

VM 563 Veterinary Epidemiology and Herd Health (3H: 3T, 0P)

This course will cover the principles in veterinary epidemiology and types of epidemiological studies. It also teaches preventive techniques of animal infectious diseases and its relation to human and environmental health.

Pre-request course(s): VM 356, VM 376

VM 564 Electronic Farming (1H: 0T, 2P)

In this course students will learn how to incorporate technologies (such as computer programs) in animal production and record keeping.

Pre-request course(s): VM 563

VM 570 General Veterinary Medicine Clinic (1H: 0T, 2P)

This course is designed to provide the students with the principles of large animal medicine including acquisition of an unbiased medical history, performance of a complete physical examination and knowledge of various diagnostic and therapeutic procedures performed on large animal patients presented to the Teaching clinic. Students will work with patients, attend daily rounds and have additional time for individual study.

Pre-request course(s): VM 471

VM 571 Clinical Animal Nutrition (1H: 1T, 0P)

This course will discuss various disorders of livestock animals that are related directly (i.e., feeding) or indirectly (i.e., metabolism) to nutrition. Also, this course will emphasize on the mechanisms behind these metabolic disorders and how they could be prevented and/or treated via nutritional management.

Pre-request course(s): VM 570

VM 573 Equine Medicine (2H: 2T, 0P)

A comprehensive course covering the etiology, epidemiology, pathogenesis, clinical and laboratory findings, diagnosis, treatment and appropriate management, and prognosis of common and/or important, non-infectious, food animal medical diseases affecting each body system. This course will cover medical (non-infectious) diseases of the respiratory, cardiac, gastrointestinal, nervous, muscular, integumentary, and urinary systems.

Pre-request course(s): VM 432, VM 570

VM 577 Large Animal Medicine Clinic 1 (1H: 0T, 3P)

This clinical course is designed to provide senior student with clinical and hands on experience in medical diseases of large animal species. The student will be working with the faculty and clinical support staff in the management of large animal cases presented to the veterinary health center. Etiology, epidemiology, methods of diagnosis and treatment, and control of common non-infectious diseases cases are reviewed.

Pre-request course(s): VM570

VM 578 Large Animal medicine clinic 2 (2H: 0T, 6P)

This clinical course is designed to provide senior student with advanced clinical training in medical diseases of large animal species. Students are expected to handle, examine, and treat presented cases, and are responsible for case admission and discharge, under the senior clinician supervision.

Pre-request course(s): VM5 77

VM 580 General Veterinary Surgery Clinic (1H: 0T, 2P)

This course will introduce the students to the basic principles of surgery with emphasis on aseptic techniques and minor surgical techniques.

Pre-request course(s): VM 484

VM 581 Large Animal Surgery (2H: 2T, 0P)

The course will cover in details the diagnosis, treatment, management, and specific surgical techniques of surgical conditions, encountered in food animals and horses.

Pre-request course(s): VM 580

VM 582 Small Animal Medicine and Surgery Clinic (2H: 0T, 6P)

This is a practical course in the diagnosis and treatment of diseases of dogs and cats. This course will train students to admit, take history, examine, outline diagnostic and treatment plan, and discharge the animals from the clinic. This course introduces the use of problem-oriented approach to study medical and surgical conditions in dogs and cats.

Pre-request course(s): VM 484

VM 583 Large Animal Surgery Clinic 1 (1H: 0T, 3P)

The course will cover in details the diagnosis, treatment, management, and specific surgical techniques of surgical conditions, encountered in food animals and horses. Student will have the chance to refine and master learned clinical skills.

Pre-request course(s): VM 580

VM 584 Large Animal Surgery Clinic 2 (1H: 0T, 3P)

This clinical course is designed to provide senior student with advanced clinical training in surgery in large animal species. Students are expected to handle, examine, and treat presented surgical cases, and are responsible for case admission and discharge, under the senior clinician supervision.

Pre-request course(s): VM 583

VM 590 General Theriogenology Clinic (1H: 0T, 2P)

This course is designed to instruct last-year veterinary students on clinical examination and diagnoses of problems of the reproduction system of all animal species. Instruction is provided on treatment and correction of clinical problems such as infertility and obstetrical procedures of the cases presented at the Veterinary Health Center.

Pre-request course(s): VM49 6, VM 498

VM 591 Theriogenology Clinic1 (1H: 0T, 3P)

This course is designed to instruct last-year veterinary students on clinical examination and diagnoses of problems of the reproduction system of all animal species. Instruction is provided on treatment and correction of clinical problems such as infertility and obstetrical procedures of the cases presented at the Veterinary Health Center.

Pre-request course(s): VM590

VM 592 Theriogenology Clinic2 (1H: 0T, 3P)

Instructions will be provided on treatment and correction of reproductive diseases, reproductive surgeries and investigating herd fertility problems in different animals. Student will have the chance to refine and master learned clinical skills.

Pre-request course(s): VM591

VM 594 Veterinary Andrology and Artificial Insemination (1H: 0T, 3P)

This course involves functions and clinical examination of the male reproductive organs. In addition, it involves male breeding soundness examination (BSE). The course also offers Infertility evaluation in males, semen abnormalities, diseases of the testes and accessory sex organs. The history and development of artificial insemination is covered and advantages and disadvantages of artificial insemination as well. Methods of semen collection, extension, packaging, freezing, cold-storage and thawing of semen are discussed. Artificial insemination procedures are also covered in this course. Finally, semen contaminants and diseases transmitted through artificial insemination and their prevention will be discussed.

Pre-request course(s): VM 591

VM 596 Case Report Seminar (1H: 0T, 2P)

In this seminar, student must give a general description to a particular case under the supervision of a clinical instructor. This includes the description of detailed case history, complete physical examination, samples collection and laboratory analysis. Discussion of the clinical and laboratory results. Establishing a precise differential list, rolling in and out the component of this list and reporting the final diagnosis. Describing the protocol of treatment and the preventive measurements.

Pre-request course(s): VM 577, VM583 , VM591