Course description

Doctor of Veterinary Medicine Program
(Revised Curriculum 2015)

Faculty of Economics

751100 ECON 100 ECONOMICS FOR EVERYDAY LIFE 3(3-0-6)

Prerequisite: None

Basic economic concepts and application for everyday life concerning production, consumption, markets, national income, public finance, money and banking, inflation and deflation, employment, international trade and finance, and economic development and environment.

Faculty of Humanities

001101 ENGL 101 FUNDAMENTAL ENGLISH 1 3(3-0-6)

Prerequisite: None

Communication in English for everyday interactions. Basic listening, speaking, reading and writing skills in various social and cultural contexts for life-long learning.

001102 ENGL 102 FUNDAMENTAL ENGLISH 2 3(3-0-6)

Prerequisite: ENGL 101 or consent of the department

Communication in English for everyday interactions. More advanced listening, speaking, reading and writing skills in various social and cultural contexts for life-long learning.

001201 ENGL 201 CRITICAL READING AND EFFECTIVE WRITING 3(3-0-6)

Prerequisite: None

English language skills for critical reading from different sources and media and effective writing on topics of students’ interests.

001226 ENGL 226 ENGLISH IN HEALTH SCIENCES CONTEXT 3(3-0-6)

Prerequisite: None

Specific language functions, components and skills for effective communication in health science contexts.
011257 PHIL 257 ETHICS 3(3-0-6)
Prerequisite: None

011269 PHIL 269 PHILOSOPHY OF SUFFICIENCY ECONOMY 3(3-0-6)
Prerequisite: None
Definition, concept and principle of philosophy of sufficiency economy. Livelihood according to philosophy of sufficiency economy. Application of the principle philosophy of sufficiency economy.

013110 PSY 110 PSYCHOLOGY AND DAILY LIFE 3(3-0-6)
Prerequisite: None; for non-major only

050100 HUGE 100 USAGE OF THE THAI LANGUAGE 3(3-0-6)
Prerequisite: None
A study of the usage of the Thai Language and practice in writing.

050111 HUGE 111 MAN AND QUEST FOR KNOWLEDGE 3(3-0-6)
Prerequisite: None
Development of thoughts and methods of thinking, which result in knowledge acquisition. Ultimate goals of individuals and societies. Inheritance, interconnection and integration of knowledge. Debates in theoretical approaches to knowledge. Modes of explanation on present social phenomena.

Faculty of Education

074101 EDHL 101 PROMOTING OF HEALTH IN EVERYDAY LIFE 3(2-3-0)
Prerequisite: None
Faculty of Fine Arts

109115  FAGE 115  LIFE AND AESTHETICS  3(3-0-6)
Prerequisite : None

Beauty in general found in nature, works of art, traditions and culture and modern media used in daily life. Aesthetics in western and eastern art. Traditions and culture, beliefs and cultural creations that reflect social wisdom.

Faculty of Business Administration

702101  FINA 101  FINANCE FOR DAILY LIFE  3(3-0-6)
Prerequisite : None

Exploring your financial health, Planning your personal financial plan, Revenue, expense, and debt service management, Insurance, Knowing how to make money work, Tax planning, Preparing for happiness and case study of financial planning.

703103  MGMT 103  INTRODUCION TO ENTREPRENEURSHIP AND BUSINESS  3(3-0-6)
Prerequisite : None

Entrepreneur role in economics development country Entrepreneur and business opportunities. The characteristic of entrepreneur and motivation factors, environment, types of business, forms of business, business plans, principle of management, marketing management, production management, financial management, accounting, taxation, business law, international business and business ethics for entrepreneur.

703131  MGMT 131  PERSONAL LEADERSHIP DEVELOPMENT  1(1-0-2)
Prerequisite : None


Faculty of Law

176100  LAGE 100  LAW AND MODERN WORLD  3(3-0-6)
Prerequisite : None

Legal concepts. Legal Institutions. Law and its roles in society. Law and international societies. Law and local problems. Law and community rights. Roles of law in the rural and urban societies. Roles of law in the globalized era. Analyses of issues derived from case studies relating to law and modern world.
Faculty of Science

20111  SC 111  THE WORLD OF SCIENCE 3(3-0-6)
Prerequisite: None

The nature and evolution of science and technology. The solar system, modern observations of planets and moons. The interrelations of Earth’s geosphere, hydrosphere, atmosphere and biosphere. Abundance, distribution and utilization of natural resources. Contemporary social issues in science and society. Enrollments are not permitted for non-science-based students.

20114  SC 114  ENVIRONMENTAL SCIENCE IN TODAY’S WORLD 3(3-0-6)
Prerequisite: None

Environment and impacts from anthropogenic activities. Environmental concerns in international venues, Importance of biodiversity; conservation for the future, Resource use, Population growth and pollution, Ozone depletion, Global warming and climate change, Energy crisis, Sustainable development (balancing of natural resource consumption and replacement), and Current environmental issues.

204100  CS 100  INFORMATION TECHNOLOGY AND MODERN LIFE 3(2-2-5)
Prerequisite: None

Computers in everyday life, Data processing and information management, Office automation software for modern life and Internet and webpage construction.

203154  CHEM 154  BASIC CHEMISTRY FOR HEALTH SCIENCE STUDENTS 2(2-0-4)
Prerequisite: None

Chemical thermodynamics, chemical equilibrium, chemical kinetics, aliphatic hydrocarbons, aromatic compounds, stereochemistry, nucleophilic substitution, free radicals, alcohols ethers and phenols, aldehydes and ketones, carboxylic acids and their derivatives, amines, carbohydrates, amino acids, peptides and proteins, lipids, heterocycles and nucleic acids.

203159  CHEM 159  BASIC CHEMISTRY LABORATORY FOR HEALTH SCIENCE STUDENTS 1(0-3-0)
Prerequisite: concurrent to 203153 OR 203154

The basic chemical experiments related to the following topics: Heats of chemical reactions, electrochemical cells, acid-base indicators and hydrolysis of salts, buffer solutions: preparation and properties, rate of chemical reactions, steam distillation, identification of hydrocarbons, alcohols, phenols, aldehydes and ketones, stereochemistry, saponification of lipid, TLC separation of amino acids, isolation and identification of casein, isolation of lipids from egg yolk, isolation and identification of DNA from yeast.
207110 PHYS 110 PHYSICS : THE SCIENCE THAT CHANGED THE WORLD 3(3-0-6)
Prerequisite : None

Paradigms and their revolutions, Ptolemy, Copernicus, and Kepler cosmos, Mechanistic perspective, Energy and thermodynamics, Electromagnetism, Atoms and matters, Quantum theory and holistic perspective, Space, time and theory of relativity and Frontier physics.

207125 PHYS 125 PHYSICS FOR VETERINARY STUDENTS 1(1-0-2)
Prerequisite : None

Physics in health sciences, stability and equilibrium of body motion, elasticity, impulsive force and bone fractures, fluids mechanics and its medical applications, waves and properties of waves, sound and ultrasound imaging, electromagnetic spectrum and medical X-rays.

207195 PHYS 195 PHYSICS LABORATORY FOR VETERINARY STUDENTS 1(0-3-0)
Prerequisite : None

A laboratory course dealing with basic experimental techniques and applications in physics for veterinary students, consisting of various experiments in mechanics, thermal physics, mechanical waves, electricity, optics and modern physics in accordance with course content in PHYS 185.

Faculty of Medicine

303210 BCHM 210 GENERAL BIOCHEMISTRY 3(2-2-5)
Prerequisite : None

Cells and cellular components, structure and functions of biomolecules namely nucleic acid, protein, carbohydrate and lipid, enzyme and cofactors, membrane transport and signal transduction, gene and human genome, DNA replication, gene expression and regulation, genetic engineering and DNA technology, bioenergetics and cellular energy production, digestion of biomolecules, absorption and metabolism of carbohydrates, lipids, amino acids and proteins, and nucleotide, interrelationships of metabolic pathways and regulation.

303262 BCHM 262 VETERINARY CLINICAL BIOCHEMISTRY 2(2-0-4)
Prerequisite : BCHM 210 (303210)

Biochemistry of cancer in human and animal, biochemistry of diseases related to; structural abnormality of biomolecules, metabolic disorders of carbohydrate, protein, lipid and nucleic acid, biochemistry knowledge–based analysis of animal diseases.
RADI 321  RADIOLOGY FOR VETERINARY STUDENTS  2(1–3–2)
Prerequisite: third year standing
Basic knowledge and skill in radiographic imaging in assisting the diagnosis of abnormality in animals and application of radiological instruments for routine examinations and research.

Faculty of Nursing

571111  NGGE 111  CRITICAL THINKING AND CREATIVE THINKING  3(2–2–5)
Prerequisite: None

571113  NGGE 113  MAINTAINING THE EQUILIBRIUM IN ADOLESCENT LIFE  3(3–0–6)
Prerequisite: None
Study of factors influencing adolescents’ way of life, including both positive and negative factors. Ways of maintaining the equilibrium in adolescents’ way of life. Prevention and management of physical, psychosocial, emotional and spiritual problems in adolescent’s lives.

Faculty of Associated Medical Sciences

510100  AMS 100  WELLNESS  3(2–3–4)
Prerequisite: None
Involving the wellness and health status in physical, emotional, social, intellectual and spiritual wellness including principle of good health in holistic both knowledge and merit, following by diet, nutrition, exercise, fitness, wellness and health status laboratory monitoring, stress management and ethic.

Faculty of Agriculture

351100  AEC 100  AGRICULTURAL ECONOMICS BASED ON SUFFICIENCY ECONOMY  3(3–0–6)
Prerequisite: None
Study on His Majesty the King’s sufficiency economy philosophy and the royal obligations as a foundation and representations of what applicable for leading one’s daily life at the individual, household, and community levels. Stress on students’ the learning from experience of various rural and agricultural communities which have applied the sufficiency economy principle, exercising systematic analytical thoughts, and proposing agricultural business model within sufficiency economy framework.
HORT 204  HORTICULTURAL FOR HEALTH  2(2-0-4)
Prerequisite: None
Importance, categories, production, and health benefits from horticultural crops which are vegetables, medicinal plants, fruits, and flowers, including their use as horticultural therapy.

CONS 211  PRINCIPLES OF CONSERVATION  3(3-0-6)
Prerequisite: None
Problems concerning deterioration of natural resources and environments. Principles and methods of management and conservation of natural resources.

ANS 202  PRINCIPLES OF FEED AND ANIMAL NUTRITION  3(3-0-6)
Prerequisite: None; for non-major students
Types and roles of feedstuffs, composition and evaluation of feed, digestion and metabolism of nutrients, feed preservation and processing and nutrient requirements of animals.

ANS 212  ANIMAL PRODUCTION  3(3-0-6)
Prerequisite: None; for non-agriculture students
A simplified version of ANS 201 for student in art, social sciences, education or those having a weaker scientific background. More detail in the economic importance, trade, nutrition and social role of livestocks.

ANS 261  STATISTICAL METHOD AND INference IN ANIMAL HUSBANDRY  3(3-0-6)
Prerequisite: second year standing
Statistic with special reference to the application in animal science, from probability, normal distribution, test of significance to factorial and splitplot design. Correlation and regression. Analysis of covariance. The computation of heritability and repeatability.

Faculty of Veterinary Medicine

VM 100  DOG CARE  2(1-2-3)
Prerequisite: None
General considerations for dog’s owner, principle of dog care, behavior, restraint, reproductive system, pregnancy including basic health information.
651101 VM 101 CAT CARE 2(1-2-3)
Prerequisite: None
General considerations for cat’s owner, principle of cat care, behavior, restraint, reproductive system, pregnancy including basic health information.

651102 VM 102 HORSE AND MANAGEMENT 2(1-2-3)
Prerequisite: None
Fundamental studies of breeds of horse, motions of horse, horse and a way of Thai life, horse in the present day and a benefit for medicine, basic principles of horse stable management and horse feeding, basic principles of horse health care, and basic principles of horse restraint, horse riding and riding tacks.

651104 VM 104 ELEPHANT IN THAI CULTURES 2(2-0-4)
Prerequisite: None
Study of Thai elephant cultures and knowledge, as the elephant biology, elephant in Thai cultures, customs, legends faiths, religions, and histories, the knowledge of the illustrated manuscript (the book on elephant science), elephant poaching, elephant training, logging, and to domesticate elephant, mahout and elephant keeper, elephant managements, elephants in Thailand.

651105 VM 105 ECOSYSTEM AND HEALTH 3(3-0-6)
Prerequisite: None
The relations between ecosystem and health and effects on human and animal life. Integration of knowledge of science for explaining the changes of plants, animals and environment, especially the changes that affect to human life effects.

651106 VM 106 Food Sanitary from Food Animal for Consumer 2(1-2-3)
Prerequisite: None
Criteria for selection raw materials and food from animal, Sanitary in production line from farm to table. Criteria selection raw materials and food from animal, Sanitary in production line from farm to table.
651107 VM 107 LEARNING THROUGH ACTIVITIES 2(1–3–0)

Prerequisite: None

This course is designed to introduce students in developing their life-skill experiences through activities which are initiated by themselves. Learning activities are emphasized on the development of student’s personalities, morality and ethical behaviors. Attention is given to various learning activities including recognizing art and culture, understanding of local wisdom, preserving of environment as well as exploring the role of community-based economy. Various activities are organized by students under the supervision agreement of class advisors with private/governmental organizations.

651109 VM 109 VETERINARY EMBRYOLOGY 2(2–0–4)

Prerequisite: None; for veterinary medicine students


651120 VM 120 PRINCIPLES OF VETERINARY GENETICS 2(2–0–4)

Prerequisite: None; for veterinary medicine students


651210 VM 210 PRINCIPLES OF VETERINARY BIOSCIENCES 4(3–3–7)

Prerequisite: None; for veterinary medicine students


651211 VM 211 BODY STRUCTURE AND FUNCTION 1 4(3–3–7)

Prerequisite: VM 109 (651109)


Lecture on principle of aquatic animal biology, principle of aquaculture, genetic in fisheries, nutrition of aquatic animal, breeding management, soil and water management and algae in aquaculture. A variety of important aquaculture species for instance fish, invertebrate, reptiles and amphibians. It also covers aquaculture economy.

Basic principles of horse restrain, horse stable management, horse feeding and nutrition, horse care and basic principle of horse riding.


Use of problem–based learning system to integrate veterinary fundamental content through seminar. Practice on problem analysis and integration of subject material. Information searching. Veterinary terminology and scientific literature review.
651312  VM 312  BODY STRUCTURE AND FUNCTION 4 4(3–3–7)

Prerequisite: VM 109 (651109)


651313  VM 313  VETERINARY GENERAL PATHOLOGY 3(2–3–5)

Prerequisite: third year standing; for veterinary medicine students

Basic mechanisms involved in cellular and tissue injuries. Degenerative changes in cells, cell death, pigmentation, circulatory disturbances, inflammatory process, tissue healing and neoplasia in animals.

651314  VM 314  VETERINARY IMMUNOLOGY 3(2–3–5)

Prerequisite: third year standing; for veterinary medicine students.


651315  VM 315  VETERINARY MICROBIOLOGY 5(4–3–9)

Prerequisite: third year standing; for veterinary medicine students.

Morphology, culturing, classification, pathogenesis and identification of veterinary important microorganisms comprising bacteria, fungi, viruses and prions.

651316  VM 316  VETERINARY PARASITOLOGY 5(4–3–9)

Prerequisite: third year standing; for veterinary medicine students.

Basic knowledge including morphology, life cycle, pathogenesis, identification and diagnosis of agents of diseases in domestic animals comprising helminthes, insects, protozoa and rickettsia.

651317  VM 317  VETERINARY PHARMACOLOGY 1 3(3–0–6)

Prerequisite: third year standing; for veterinary medicine students.

Principles of pharmacokinetics and pharmacodynamics. Drug interaction. Veterinary pharmacology of systemic drugs including nervous, gastrointestinal, circulation and urinary, blood and immune, reproductive and endocrine, respiratory and musculoskeletal systems.
VETERINARY TOXICOLOGY 2(2–0–4)
Prerequisite: third year standing; for veterinary medicine students.
Basic principles of veterinary toxicology. Therapy of toxicoses in animals. Toxicology of zootoxins, plant-related toxins, mycotoxins, heavy metals, pesticides and miscellaneous toxic substances.

VETERINARY FIELD PRACTICE 1 1(0–6–3)
Prerequisite: third year standing; for veterinary medicine students.
Field practice on animal husbandry and livestock management through working in related private or government organizations.

VETERINARY INTEGRATIVE PROBLEM SOLVING 2 2(2–0–4)
Prerequisite: third year standing; for veterinary medicine students.
Seminar using problem-based learning to integrate veterinary content in fundamental level.

VETERINARY INTEGRATIVE PROBLEM SOLVING 3 2(2–0–4)
Prerequisite: third year standing; for veterinary medicine students.
Seminar using problem-based learning to integrate veterinary content in fundamental level and clinical level.

FOOD SAFETY IN VETERINARY MEDICINE 1 4(3–3–7)
Prerequisite: third year standing; for veterinary medicine students.
Roles of veterinarian in food protection of food from animal origin. Methods of sampling and quality control. Roles of microorganisms in food from animal origin. Foodborne diseases throughout food chain. Composition and testing in food. Deterioration and preservation in food from animal origin. Raw materials and food additives in using animal-originated food production. Contaminant and impurity in food from animal origin. Technology in animal-originated food production.

FOOD SAFETY IN VETERINARY MEDICINE 2 4(3–3–7)
Prerequisite: fourth year standing; for veterinary medicine students.

VETERINARY ENVIRONMENTAL HEALTH 1(1–0–2)
Prerequisite: fourth year standing; for veterinary medicine students.
651419 VM 419 VETERINARY LAWS 1(1-0-2)

Prerequisite: fourth year standing; for veterinary medicine students


651424 VM 424 ZOONOSES 2(2-0-4)

Prerequisite: fourth year standing; for veterinary medicine students

Zoonoses classification, causative agents, transmission, vector, clinical symptoms in both human and animals, prevention, diagnosis and treatment of important zoonoses caused by virus, bacteria, parasite, chlamydia and fungus.

651425 VM 425 VETERINARY EPIDEMIOLOGY 3(2-2-5)

Prerequisite: third year standing; for veterinary medicine students.


651430 VM 430 PRINCIPLES OF THERIOGENOLOGY 2(2-0-4)

Prerequisite: fourth year standing; for veterinary medicine students

Breeding soundness in male and female breeder animals. Reproductive failure in animals. Abnormality of pregnancy, parturition and postpartum in animals. Assisted reproductive technology such as artificial insemination and embryo transfer, estrus synchronization and ovulation induction, pregnancy diagnosis, parturition management, cryopreservation of gametes and embryos.

651433 VM 433 LABORATORY ANIMAL SCIENCE 3(2-2-5)

Prerequisite: fourth year standing; for veterinary medicine students

General consideration in laboratory animal care, species and breed, biology and husbandry, housing and management, production system, prevention and control of disease, materials for laboratory animal care and technique for restraint, veterinary clinical procedure of laboratory animals, and ethics in usage of laboratory animals.

651434 VM 434 VETERINARY SYSTEMIC PATHOLOGY 5(3-6-9)

Prerequisite: fourth year standing; for veterinary medicine students

Reactions of specific organ systems to infection including hemopoietic and lymphatic systems, endocrine system, male and female reproductive systems, respiratory system, gastrointestinal system, nervous and sensory systems, integument system, musculoskeletal and joint systems, cardiovascular system and urinary system.
651435 VM 435 VETERINARY CLINICAL PATHOLOGY 4(3–3–7)
Prerequisite: fourth year standing; for veterinary medicine students
Pathological changes detection in body functions using laboratory interpretation including hematology, blood coagulation abnormality, bone marrow examination, blood chemistry, cytology, blood gas and electrolytes. Practice on necropsy.

651436 VM 436 PRINCIPLES OF VETERINARY MEDICINE 2(1–2–3)
Prerequisite: fourth year standing; for veterinary medicine students

651437 VM 437 PRINCIPLES OF VETERINARY SURGERY AND ANESTHESIOLOGY 3(2–3–5)
Prerequisite: fourth year standing; for veterinary medicine students

651438 VM 438 PRACTICE OF SURGERY AND OBSTETRICS IN LIVESTOCK 1(0–3–1)
Prerequisite: fourth year standing; for veterinary medicine students
Practice of using sedative agents for both local and general anesthesia in ruminants, pigs and fish. Basic surgical operation in ruminants, pigs and fish. Reproductive management and obstetrics in ruminants, pigs, fish and poultry.

651439 VM 439 DISEASES OF SMALL ANIMALS 1 3(3–0–6)
Prerequisite: fourth year standing; for veterinary medicine students

651440 VM 440 DIAGNOSTIC TECHNIQUES AND IMAGING IN SMALL ANIMALS 2(1–2–3)
Prerequisite: fourth year standing; for veterinary medicine students
Interpretation of diagnostic images, physical examination techniques, diagnosis and sample collection in small animals.
Prerequisite: VM 317 (651317)


Prerequisite: fourth year standing; for veterinary medicine students

Diseases and disorders leading to poor equine athletic performance. Diseases and disorders leading to poor equine productivity and conditions. Diseases and disorders leading to life threatening conditions in horses. Diseases and disorders leading to non-life threatening conditions in horses. Equine contagious diseases. Control and prevention of diseases. Roles of veterinarians for epidemic diseases control.

Prerequisite: fourth year standing; for veterinary medicine students

Field practice on veterinary paraclinic or veterinary public health, aquatic animals, horses, domestic animals or wildlife animals management through working in private or government organizations.

Prerequisite: fifth year standing; for veterinary medicine students

Basic biology and taxonomy of wild animals. Restraint and translocation of zoo and wild animals. Zoo management and animal behaviors enrichment. Breeding system in zoo and exotic animals. Preventive medicine in zoo and wild animals. Law, regulation and ethics in zoo and wild animals. Zoo and wild animals zoonoses. Common diseases in zoo and exotic animals. Anesthesia and surgery in exotic animals. Wild animals conservation.

Prerequisite: fifth year standing; for veterinary medicine students


Prerequisite: fifth year standing; for veterinary medicine students

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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits (Lecture-Tutorial-Practical)</th>
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<tbody>
<tr>
<td>651524</td>
<td>SMALL ANIMAL SURGERY AND ANESTHESIOLOGY</td>
<td>3(2–3–5)</td>
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<td>Prerequisite: fifth year standing; for veterinary medicine students</td>
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<tr>
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<td>Soft tissue surgery, orthopedic surgery, anesthesia and monitoring in small animals.</td>
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<tr>
<td>651525</td>
<td>DISEASES OF AQUATIC ANIMALS</td>
<td>3(3–0–6)</td>
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<td>Prerequisite: fifth year standing; for veterinary medicine students</td>
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<tr>
<td></td>
<td>Diagnostic and therapeutic techniques in aquatic animals. Drugs and chemical used in aquatic animals. Common diseases in aquatic animals, amphibians and reptiles. Health care and standard aquatic animal farm management. Aquatic animals welfare.</td>
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<tr>
<td>651526</td>
<td>DISEASES OF POULTRY</td>
<td>3(3–0–6)</td>
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<td>Prerequisite: fifth year standing; for veterinary medicine students</td>
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<tr>
<td></td>
<td>Important infectious diseases, defense mechanisms, disease diagnosis, disease control and prevention in poultry.</td>
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<tr>
<td>651527</td>
<td>DISEASES OF SWINE</td>
<td>3(3–0–6)</td>
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<td>Prerequisite: fifth year standing; for veterinary medicine students</td>
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<tr>
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<td>Common infectious diseases in pigs, etiology, clinical signs, epidemiology, pathogenesis, diagnosis, treatment and prevention.</td>
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<tr>
<td>651529</td>
<td>DISEASES OF RUMINANTS</td>
<td>4(4–0–8)</td>
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<td>Prerequisite: fifth year standing; for veterinary medicine students</td>
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<tr>
<td></td>
<td>History taking and physical examination. Causes of diseases, pathogenesis, clinical signs, diagnosis and treatments of diseases in ruminants affecting circulatory and hematopoietic systems, respiratory system, gastro-intestinal system, reproductive system and congenital abnormalities, nervous system, integuments and musculoskeletal systems. Metabolic diseases. Mastitis in ruminants. Disease control and prevention in ruminants. Epidemic diseases reporting.</td>
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<tr>
<td>651551</td>
<td>FLOCK HEALTH MANAGEMENT AND PRODUCTION MEDICINE</td>
<td>2(2–0–4)</td>
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<td>IN POULTRY</td>
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<td>Prerequisite: fifth year standing; for veterinary medicine students</td>
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**651552 VM 552 HERD HEALTH MANAGEMENT AND PRODUCTION MEDICINE IN SWINE**

Prerequisite: fifth year standing; for veterinary medicine students


**651553 VM 553 HERD HEALTH MANAGEMENT AND PRODUCTION MEDICINE IN RUMINANTS**

Prerequisite: fifth year standing; for veterinary medicine students


**651561 VM 561 SMALL ANIMAL CLINICAL SKILL PRACTICE**

Prerequisite: fifth year standing; for veterinary medicine students

Clinical skills in small animals including medicine, surgery, clinical pathology and necropsy.

**651562 VM 562 VETERINARY PUBLIC HEALTH SKILL PRACTICE**

Prerequisite: fifth year standing; for veterinary medicine students

Practice to increase laboratory skills in the field of veterinary public health under supervision of instructors.

**651563 VM 563 ELEPHANT AND WILDLIFE CLINICAL SKILL PRACTICE**

Prerequisite: fifth year standing; for veterinary medicine students

Clinical skills practice in elephant and wildlife including elephant camp and zoo design and management, restraint of elephant and wildlife, diagnostic and therapeutic techniques of elephant and wildlife, treatment of elephant and wildlife common diseases, management of elephant and wildlife, and conservation of elephant and wildlife in Thailand.

**651564 VM 564 EQUINE CLINICAL SKILL PRACTICE**

Prerequisite: fifth year standing; for veterinary medicine students

Clinical skills practice in equine including horse identification, physical examination, drug administration, intravenous catheterization, blood collection, lameness examination, perineural and intra-articular anesthesia, radiography and ultrasonography, bandaging techniques for extremity, hoof trimming and hoof abscess opening,
rectal palpation for reproductive system examination, oral examination and dental care, nasogastric intubation and gastric lavage and ophthalmic examination.

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<tr>
<td>651565</td>
<td>AVIAN CLINICAL SKILL PRACTICE</td>
<td>1(0-3-1)</td>
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<td>Prerequisite: fifth year standing; for veterinary medicine students</td>
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<tr>
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<td>Clinical skills practice in poultry including diseases prevention and control, medicine, clinical pathology and necropsy, farm management system and problems analysis solving.</td>
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<tr>
<td>651566</td>
<td>SWINE CLINICAL SKILL PRACTICE</td>
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<tr>
<td>651567</td>
<td>RUMINANT CLINICAL SKILL PRACTICE</td>
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<td>Prerequisite: fifth year standing; for veterinary medicine students</td>
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<td>Practice on history taking and recording data for individual and herd–level of ruminants. Physical examination. Sample collection for diagnosis and interpretation. Explaining, giving recommendation and solving health problems of ruminants together with performing basic treatments. Recording and analyzing health and production data. Nutritional status assessment and providing advice for feeding and rearing ruminants</td>
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<tr>
<td>651568</td>
<td>AQUATIC ANIMAL CLINICAL SKILL PRACTICE</td>
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<td>Prerequisite: fifth year standing; for veterinary medicine students</td>
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<tr>
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<td>Clinical skills practice in aquatic animals including drugs and chemical used in aquatic animals, anesthesia and surgery in fish, physical examination, sample collection of live animals, blood sampling and hematological examination, necropsy and sampling collection for laboratory in fish and shrimp, water sampling and water quality analysis and production and management system in fish farms.</td>
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<td>651620</td>
<td>VETERINARY PERSPECTIVES</td>
<td>2(2-0-4)</td>
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<td>Prerequisite: sixth year standing; for veterinary medicine students</td>
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<td>Information about veterinary profession, either domestic or international receiving directly from experienced and successful persons in veterinary profession from several aspects. Creation of good attitude and construction of fondness toward veterinary profession. Grading will be given on satisfactory or unsatisfactory basis.</td>
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651630 VM 630 AQUATIC ANIMAL PRACTICE – CLERKSHIP 3(0-9-4)
Prerequisite: sixth year standing; for veterinary medicine students
Practice clinical skills in aquatic animal including production management, diagnostic and therapeutic techniques and studying on aquatic animal researches under supervision of instructors and adjoined veterinarians in animal health center, demonstration farm, commercial farm, animal hospital and other related facilities in government and private sectors.

651631 VM 631 ELEPHANT AND WILDLIFE PRACTICE – CLERKSHIP 3(0-9-4)
Prerequisite: sixth year standing; for veterinary medicine students
Practice clinical skills in elephant, wildlife and exotic pets including health management, necropsy, diagnostic and therapeutic techniques and studying on elephant, wildlife and exotic pets researches under supervision of instructors and adjoined veterinarians in animal health center, farm, animal hospital and other related facilities in government and private sectors.

651640 VM 640 NECROPSY AND DIAGNOSTIC LABORATORY – CLERKSHIP 3(0-9-4)
Prerequisite: sixth year standing; for veterinary medicine students
Provide clinical experiences in necropsy and diagnostic laboratories practice through working veterinarian under supervision of instructors or adjoined veterinarians in Animal Health or demonstration farm, commercial farm, animal hospital or other related facilities.

651641 VM 641 ABATTOIRS AND VETERINARY PUBLIC HEALTH – CLERKSHIP 3(0-9-4)
Prerequisite: sixth year standing; for veterinary medicine students
Provide clinical experiences in abattoir and veterinary public health practice through working veterinarian under supervision of instructors or adjoined veterinarians in Animal Health or demonstration farm, animal hospital or other related facilities.

651642 VM 642 DIAGNOSTIC IMAGING, ANESTHESIOLOGY AND SURGERY IN SMALL ANIMAL PRACTICE–CLERKSHIP 3(0-9-4)
Prerequisite: sixth year standing; for veterinary medicine students
Practice in the field of diagnostic imaging, anesthesiology, surgery and emergency and critical care of small animals as veterinarian under supervision of instructors and/or adjoined veterinarians in Small Animal Hospital.

651643 VM 643 CLINICAL CLERKSHIP IN DOGS AND CATS 3(0-9-4)
Prerequisite: sixth year standing; for veterinary medicine students
Practice in the field of internal medicine, surgery, diagnostic imaging, and anesthesia in dogs and cats as veterinarian under supervision of instructors and or adjoined veterinarians in Small Animal Hospital.
EQUINE PRACTICE – CLERKSHIP

Prerequisite: sixth year standing; for veterinary medicine students

Providing clinical experiences in equine practice through working as a veterinarian under supervision of instructors or adjoined veterinarians in Animal Health Center, demonstration farms, commercial farms, animal hospitals or other related facilities.

SWINE PRACTICE – CLERKSHIP

Prerequisite: sixth year standing; for veterinary medicine students

Providing clinical experience in swine practice through working as a veterinarian under supervision of instructors or adjunct instructors in the Animal Health Center, demonstration farm, commercial farm, animal hospital or other related facilities.

RUMINANT PRACTICE – CLERKSHIP 1

Prerequisite: sixth year standing; for veterinary medicine students

Providing clinical experience in dairy practice through working as a veterinarian under supervision of instructors or adjunct instructors in the Animal Health Center, demonstration farm, commercial farm, animal hospital or other related facilities.

POULTRY PRACTICE – CLERKSHIP

Prerequisite: sixth year standing; for veterinary medicine students

Clinical experience in avian practice under supervision of instructors or veterinarians in animal health center, farms, animal hospitals or other related organizations.

PROBLEMS IN NECROPSY AND DIAGNOSTIC LABORATORY – CLERKSHIP

Prerequisite: sixth year standing; for veterinary medicine students

Advanced clinical experience in diagnostic laboratory and necropsy practice through working as a veterinarian and through investigation of interesting problems under supervision of instructors or adjoined veterinarians in the Animal Health Center, demonstration farm, commercial farm, animal hospital or other related facilities.
651651 VM 651 PROBLEMS IN ABATTOIRS AND VETERINARY PUBLIC HEALTH – CLERKSHIP 3(0–9–4)

Prerequisite: sixth year standing; for veterinary medicine students

Advanced clinical experience in veterinary public health practice through working as a veterinarian and through investigation of interesting problems under supervision of instructors or adjoined veterinarians in the Animal Health Center, demonstration farm, commercial farm, animal hospital or other related facilities.

651652 VM 652 PROBLEMS IN CANINE AND FELINE DIAGNOSTIC IMAGING AND ANESTHESIOLOGY–CLERKSHIP 3(0–9–4)

Prerequisite: sixth year standing; for veterinary medicine students

Advanced clinical experience in canine and feline diagnostic imaging and anesthesiology practice through working as a veterinarian and through investigation of interesting problems under supervision of instructors or adjoined veterinarians from the Animal Health Center, Small Animal Teaching Hospital or other related facilities. Grading will be given on satisfactory or unsatisfactory basis.

651653 VM 653 PROBLEMS IN COMPANION ANIMAL PRACTICE – CLERKSHIP 3(0–9–4)

Prerequisite: sixth year standing; for veterinary medicine students

Practice of clinical experience in companion animal field under supervision of instructors or adjoined veterinarians in the animal health center, animal hospital or other related facilities.

651654 VM 654 PROBLEMS IN EQUINE PRACTICE – CLERKSHIP 3(0–9–4)

Prerequisite: sixth year standing; for veterinary medicine students

Advanced clinical experience in equine practice through working as a veterinarian and investigation of interesting problems under supervision of instructors or adjoined veterinarians in Animal Health Center, demonstration farm, commercial farm, animal hospital or other related facilities.

651656 VM 656 PROBLEMS IN SWINE PRACTICE – CLERKSHIP 3(0–9–4)

Prerequisite: sixth year standing; for veterinary medicine students

Advanced clinical experience in swine practice through working as a veterinarian and through investigation of interesting problems under supervision of instructors or adjoined veterinarians in the Animal Health Center, demonstration farm, commercial farm, animal hospital or other related facilities.
651657 VM 657 PROBLEMS IN RUMINANT PRACTICE – CLERKSHIP 3(0–9–4)

Prerequisite: sixth year standing; for veterinary medicine students

Advanced clinical experience in ruminant practice through working as a veterinarian and through investigation of interesting problems under supervision of instructors or adjoined veterinarians in the Animal Health Center, demonstration farm, commercial farm, animal hospital or other related facilities.

651658 VM 658 PROBLEMS IN AVIAN PRACTICE – CLERKSHIP 3(0–9–4)

Prerequisite: sixth year standing; for veterinary medicine students

Advanced clinical experience in poultry practice through working as a veterinarian and through investigation of interesting problems under supervision of instructors or adjoined veterinarians in the Animal Health Center, demonstration farm, commercial farm, animal hospital or other related facilities.

651660 VM 660 PROBLEMS IN RUMINANT THERIOGENOLOGY–CLERKSHIP 3(0–9–4)

Prerequisite: sixth year standing; for veterinary medicine students

Practice for advanced clinical experience or studying interesting problems related to reproductive system in ruminant under supervision of instructors or adjoined veterinarians of Animal Health Service Center. Grading will be given on satisfactory or unsatisfactory basis.

651661 VM 661 PROBLEMS IN CANINE AND FELINE SURGERY–CLERKSHIP 3(0–9–4)

Prerequisite: sixth year standing; for veterinary medicine students

Advanced clinical experience in clinical practice in dogs and cats through working as a veterinarian and through investigation of interesting problems in surgery, anesthesiology and diagnostic imaging under supervision of instructors and/or adjoined veterinarians in small animal hospital. Grading will be given on satisfactory or unsatisfactory basis.

651663 VM 663 INTENSIVE CARE AND EMERGENCY UNIT – CLERKSHIP 3(0–9–4)

Prerequisite: sixth year standing; for veterinary medicine students

Advanced clinical experience in intensive care and emergency units through working as a veterinarian and through investigation of interesting problems under supervision of instructors or adjoined veterinarians in the Animal Health Center, demonstration farm, commercial farm, animal hospital or other related facilities.

651665 VM 665 PROBLEMS IN AQUATIC ANIMAL PRACTICE – CLERKSHIP 3(0–9–4)

Prerequisite: sixth year standing; for veterinary medicine students

Practice specific clinical skills in aquatic animal including production management and diagnostic and therapeutic techniques under supervision of instructors and adjoined veterinarians in animal health center, demonstration farm, commercial farm, animal hospital and other related facilities in government and private sectors.
651666  VM 666   PROBLEMS IN ELEPHANT AND WILDLIFE PRACTICE – CLERKSHIP  3(0–9–4)

Prerequisite: sixth year standing; for veterinary medicine students

Practice specific clinical skills in elephant, zoo animal, wildlife and exotic pet through working as veterinarian and investigation of interested problems under supervision of instructors and adjoined veterinarians in Animal Health Center, elephant hospital, elephant camp, zoo or other related facilities.

651670  VM 670   VETERINARY PROFESSIONAL EXPERIENCE  4(0–12–6)

Prerequisite: sixth year standing; for veterinary medicine students

Working in cooperative units either governmental or private units, such as animal farms, hospitals, clinics, companies, under the supervision of instructors, or veterinarians, or professional specialists from cooperative units that students enroll for work. Grading will be given on satisfactory or unsatisfactory basis.

651697  VM 697   RESEARCH IN VETERINARY MEDICINE  3(0–18–9)

Prerequisite: sixth year standing; for veterinary medicine students

Research methodology. Conducting a research project in veterinary medicine, under general guidance and supervision of instructors who have expertise on the students’ selected projects. Grading will be given on satisfactory or unsatisfactory basis.