

EDUCATIONAL PLAN

For the

School of Veterinary Medicine
Ross University

Approved by the Faculty on July 20, 2007

IDEAL Attributes for Graduates of the Pre-clinical DVM Program

A. ROSS UNIVERSITY seeks to graduate students who are known for their knowledge base:

ROSS UNIVERSITY graduates should understand the scientific basis of veterinary medicine and apply that understanding to veterinary practice. They should comprehend disease at a molecular, cellular, systemic, individual, and population level. They should have a comprehensive knowledge of the body as an intact organism and of its major organ systems. They should understand the principles of homeostasis, the processes of aberrant growth, the modes of infection and disease transmission, the responses to stress, injury, and general or basic behavioral traits of animals. They should also have a foundation in nutrition, immunology, reproduction and development, pharmacology and toxicology, genetics, epidemiology, preventative medicine and population health. They should have a comprehensive grounding in comparative biology between animal species.

ROSS UNIVERSITY graduates should expertly combine their understanding of these diverse biomedical areas into the effective medical management and treatment of sick animals, as compromised by disease, trauma, or other health-related issues. They should understand the etiology, pathogenesis, and time course of common diseases, and the clinical, laboratory, radiographic and pathologic manifestations of diseases and injury. They should be knowledgeable about risk factors for disease and injury. They should use this diversity of knowledge to help maintain the wellness of individuals and populations of animals. They should incorporate modern diagnostic and therapeutic modalities into their practice. They should know how to find and use medical information. They should promote the health of animals and the public through client and public education, service, and action. They should engage in lifelong learning to remain current in their understanding of the scientific basis of veterinary medicine.

ROSS UNIVERSITY graduates should be aware of and conversant in the benefits of the animal-human bond and the contributions that animals make to the well being of humans. They should be knowledgeable of animal-related disease threats to human health, including environmental factors and potential biosecurity issues. ROSS UNIVERSITY graduates should recognize the breadth of the veterinary discipline, and especially understand the important and diverse roles that animals play in the health, economics, food-supply, recreation, and well being of mankind.

Above all else, Ross University graduates should have the ability to critically think and to integrate what they have learned to solve problems. The problems to be solved need not be limited to the practice arena. A graduate's knowledge base and problem solving ability should apply to the research laboratory, industry, specialty practice, public service, or academia. The ideal graduate should be prepared to grow beyond the DVM training program. ROSS UNIVERSITY graduates should understand that the DVM degree is an entry-level degree and that, in order to function effectively as a seasoned veterinarian or as a specialist, they will need to invest considerable additional educational time and efforts.

Upon completion of the DVM curriculum, graduates of the School of Veterinary Medicine should possess the following knowledge base (walk-about knowledge):

a) *A Knowledge of Disease* that includes:

- an understanding of the molecular, biochemical, and cellular mechanisms important in maintaining the body's homeostasis and normal function
- a comprehension of disease at the molecular, cellular, systemic, individual and population level
- an understanding of the various etiologies of disease including metabolic, nutritional, traumatic, degenerative, toxic, infectious, parasitic, immune, neoplastic, genetic, developmental, and environmental; their causes, and the clinical reasoning that allows a distinction to be made between them
- the ability to integrate these understandings to solve medical and research problems
- an appreciation and interpretation of applied, basic and clinical research in the advancement of medical knowledge

b) The principles of *Animal Wellness and Health Maintenance* that includes:

- an understanding of adequate nutrition and normal eating patterns
- an understanding of healthy growth patterns, especially as they apply to food animals
- an understanding of and familiarity with common immunization protocols
- an understanding of normal theriogenology and animal husbandry
- an understanding of the risk factors for animal disease and injury and common practices for their prevention
- an understanding of the principles of population health and epidemiology
- an understanding of the appropriate tests for detecting animals or groups of animals at risk for specific diseases or in the early stage of disease, and of strategies for responding appropriately

c) The principles of *Diagnosis, Medical Management, and Treatment* that include:

- an understanding of how to find and use medical knowledge, and of the application of the scientific method to clinical reasoning, diagnosis, and data evaluation
- an understanding of the clinical, laboratory, radiographic and pathologic manifestations of common animal diseases, and the appropriate selective use of these and other

diagnostic procedures in diagnosis strategies; the ability to interpret the results of commonly used diagnostic procedures; and a knowledge of the correct collection, storing, and handling of diagnostic samples

- a ready recognition of common animal species and/or breeds
- an understanding of general or basic behavior traits across species and of behavioral responses to disease and trauma
- an understanding of mechanisms, clinical uses, and pharmacokinetics of drugs and pharmaceuticals commonly used in practice including their mechanisms of action, contraindications, side effects, incompatibilities, and withdrawal times. They should be able to accurately and consistently calculate drug dosages appropriate to clinical practice
- an understanding of basic mathematical operations, the Metric System, and elementary statistics
- an understanding of routine surgical procedures, tissue handling techniques for surgical procedures, and anesthesia

d) Effective *Communication* skills that include:

- the ability to effectively communicate in English by both written and spoken means
- an understanding of interpersonal and group dynamics
- an understanding of the importance of communication skills to effective health care delivery
- an understanding of the use of animals in sport, recreation, agriculture, research and industry
- an understanding of the nature of the animal-human bond and the contributions that animals can make to human health and well-being
- cognizance of common non-traditional therapies and the ability to evaluate evidence of their effectiveness

e) A knowledge base for *Public Health and research* that includes:

- an understanding of disease transmission between animals and humans and other animal disease threats to human health, including environmentally-based and food-borne diseases and drug residues; possessing the knowledge to effectively communicate these occupational hazards to clients and staff

- an understanding of approaches to the control of animal-animal and animal-human disease transmission

f) Introductory knowledge of veterinary *Business Practice* that includes:

- a general understanding of the working environment of a typical veterinary practice, with an introductory level of knowledge of small business management and economics
- a thorough understanding and appreciation for the “model code of ethics for veterinarians” as outlined by the AVMA and the AAVSB
- a thorough understanding and appreciation for the “model state practice act” as outlined by the AVMA and AAVSB

B. ROSS UNIVERSITY seeks to graduate students who are known for their skills:

ROSS UNIVERSITY graduates should be clinically and professionally skilled in providing care to both individual and populations of animals. They should be able to obtain from their clients a detailed and accurate history, to safely and humanely handle and restrain animals for examination, and to perform complete, as well as limited organ system specific, physical examinations. They should have the skill to obtain the necessary samples for diagnostic evaluations. They should be proficient in diagnostic reasoning, in developing problem lists and differential diagnoses, and to reason deductively and critically to solve clinical problems. From such analyses, they should be able to develop appropriate clinical management and therapeutic strategies for a patient. They should be technically competent in common clinical and surgical procedures, as well as in the administration of anesthetics and therapeutics. They should be compassionate and skillful in relieving pain and conducting euthanasia.

ROSS UNIVERSITY graduates should have the range of interpersonal skills to communicate effectively and establish rapport with clients, colleagues and staff. They should be able to discuss clinical options with their clients in an honest, compassionate and objective manner. They should be able to recognize when their skills are limited, must know how to seek information, and should seek consultation and/or referral when necessary. ROSS UNIVERSITY graduates should have the skills and aptitude to seek out, critically evaluate and appropriately use new knowledge. They should have the skills and commitment to remain current in their biomedical knowledge and clinical skills

Upon completing the DVM curriculum, graduates of the CVM should have the following SKILLS:

- the ability to reason deductively and critically to solve problems
- the interpersonal skills to communicate effectively, both orally and in writing, and to establish rapport with clients, colleagues, and staff

- the ability to effectively listen to and elicit from a client the full history of the patient (This skill requires not only familiarity with medical terminology, but also with lay terminology, expressions, and descriptions.)
- the ability to safely and humanely restrain animals for examination
- the ability to perform both a complete and an organ system-specific physical examination, including the assessment of behavioral manifestations of disease and trauma
- the ability to recognize patients with life threatening conditions and to institute appropriate therapy
- the ability to perform routine diagnostic and therapeutic technical procedures
- the ability to develop problem lists and differential diagnoses, to correlate clinical signs with appropriate organ systems, and to resolve clinical problems by logical reasoning and the application of the principles of evidence-based medicine
- the ability to develop appropriate clinical management and therapeutic strategies and the ability to administer therapeutics
- the ability to perform routine surgical procedures
- the ability to perform routine anesthesia and administer commonly accepted anesthetic agents/protocols
- the common clinical skills and competencies for animal reproduction and neonatal care
- the clinical acumen to appropriately monitor progress and to adjust therapy and diagnosis according to results
- the ability to recognize when their veterinary knowledge and skill is limited and to seek consultation and referral
- the ability to know when surgical intervention is and is not in the best interest of the patient
- the ability and knowledge to ameliorate suffering of animals
- the ability to identify when euthanasia is an appropriate option, to effectively and compassionately communicate the range of options to the client and, as appropriate, implement euthanasia under compassionate conditions for the animal and client
- the competence to identify and suggest approaches to help prevent disease and trauma in individual and groups of animals, including the ability to conduct an environmental

assessment for hazards including toxic chemicals and plants

- the ability to create, maintain and use accurate and legible medical records and to understand the implications of altering a medical record
- the ability to use information technology to access and retrieve from electronic databases and other resources accurate biomedical information, diagnostic strategies, and medical records
- the ability to critically examine new knowledge, with an understanding of the basic concepts and principles of scientific investigation in the biomedical sciences

C. Ross University seeks to graduate students who are known for their compassion, intellectual honesty, trustworthiness, and ethical behavior:

ROSS UNIVERSITY graduates should bring to the study and practice of veterinary medicine those character traits, attitudes, and values that underpin high quality veterinary care. At all times, treatment of animals by our students and our graduates must be humane. They should strive to meet the health needs and well being of their patients. Students and graduates should strive to know themselves enough to understand and recognize their limitations, or boundaries.

ROSS UNIVERSITY graduates should compassionately and empathetically serve and respect their clients without regard to clients' beliefs, values, ethnicity, gender, sexual orientation, or economic status. They should have concern and be advocates for the welfare of their clients and their clients' community, particularly in the areas of public health and safety.

ROSS UNIVERSITY graduates should be trustworthy and truthful in all professional dealings. They should be open to change and new ideas. They should be committed to working collaboratively with other veterinarians, other health care professionals, and community and regulatory agencies; they should value professional interaction in these areas; and should develop a global perspective on the role of veterinary medicine. They must recognize, accept, and adopt the ethical precepts of the veterinary profession and their obligations under the law.

Over the course of the DVM curriculum, a graduate of the RUSVM should have exhibited the following PROFESSIONAL CHARACTERISTICS:

- interacted with instructors, classmates, staff, clients, their animals, and the community with honesty, compassion, empathy, and respect
- did not allow considerations of religion, ethnicity, gender, sexual orientation, politics or social standing to preclude productive and constructive relationships
- fully utilized his/her intellectual ability, to exercise good judgment, to complete patient care responsibilities promptly and properly, and to relate to patients, their owners and their animals with courtesy, compassion, integrity, maturity, and respect for their dignity

- behaved and presented themselves in a mature, professional manner at all times
- demonstrated the ability to work collaboratively and flexibly
- demonstrated the moral fiber to never compromise care of an animal for which they were responsible, regardless of whether this care conflicted with personal schedules or activities
- did not engage in educational activities or patient care duties while under the influence of alcohol or non-prescribed, illicit drugs. In addition, the student did not engage in patient care duties while impaired in any manner by any substance (i.e., even prescribed drugs that are known to impact performance)
- used the authority, special privileges, and trust inherent in the veterinary student-client relationship solely for the benefit of both the client and the patient and avoided behaviors that constitute misuse of this power
- demonstrated the ability to accept and admit mistakes, and seek assistance when necessary
- constantly improved their knowledge of veterinary care.