PROFESSIONAL VETERINARY MEDICINE CURRICULUM 2006-2007

YEAR 1 – Fall Semester

Course #	Course Name	Description	Coordinator	Credits
VM 601	Perspectives in Veterinary Medicine	Overview of professional activities and career choices	Dr. Anne Avery	1
VM 606	Veterinary Immunology	Basic components and principal regulatory mechanisms of immunity.	Dr. Gerry Callahan	3
VM 616	Functional Anatomy	Comparative anatomy, histology & physiology of musculoskeletal system; basic concepts of histology, cell biology & embryology	Dr. Anna Fails	8
VM 618	Organ Systems: Anatomy/ Physiology	Gross, microscopic anatomy and physiology of gastrointestinal, cardiovascular, respiratory, hemo-poietic, urinary systems in selected domestic animals	Dr. Dick Bowen	7
VM 625	Principles of Diagnostic Imaging	Diagnostic radiology, computer tomography, ultrasound, magnetic resonance and nuclear medicine	Dr. Phillip Steyn	2
YEAR 1 FALL SEMESTER ELECTIVES				
BA 205	Fundamentals of Accounting	Designed to provide non-business majors with a basic understanding of financial accounting and an introduction to managerial accounting	Dr. L. Long	3

YEAR 1 - Spring Semester

Course #	Course Name	Description	Coordinator	Credits
VM 619	Veterinary Neurobiology	Structural & functional foundations of nervous system activity; introduction to clinical neurology	Dr. Ray Whalen	4
VM 623	Veterinary Nutrition and Metabolism	Intermediary metabolism, nutrients & animal nutrition	TBD	2
VM637	Veterinary Bacteriology and Mycology	Biology of bacterial and fungal pathogens of animals with emphasis on common infectious disease encountered in veterinary practice.	Dr. Robert Jones	3
VM 639	Veterinary Virology and Parasitology	Biology of helminth, arthropod, protozoan and viral pathogens of animals with emphasis on common infectious disease encountered in veterinary practice.	Dr. Len Pearson	3
VM 640	Biology of Disease I	Introduction to mechanisms of subcellular, cellular, tissue, & organ response to injury and associated pathological processes	Dr. Gary Mason	6

VM 648	Food Animal Production & Food Safety	Basic orientation to food animal production units, herd health concepts, and issues of food safety from preharvest through processing and distribution	Dr. Frank Garry	2
YEAR 1 SPRING SEMESTER ELECTIVES				
VM621	Exotic Animal Anatomy & Husbandry	Applied veterinary anatomy and husbandry of birds, reptiles, amphibians & fish	Drs. S. Pitcaithley and T. Campbell	2
VM 650	Veterinary Microbiological Laboratory Techniques	Microbiological laboratory techniques using immunology, bacteriology and virology for diagnosis of animal diseases	Dr. Len Pearson	1
BF305	Fundamentals of Finance	Role of finance in management of the firm; role, structure of financial markets and institutions, valuation of basic securities	TBD	3

Year 2 - Fall Semester

Course #	Course Name	Description	Coordinator	Credits
VM 704	Veterinary Ethics	Moral & ethical issues affecting the veterinary profession	Dr. Bernard Rollin	1
VM 705	Veterinary Jurisprudence	Legal & professional issues affecting the practice of veterinary medicine	Dr. Regina Schoenfeld-Tacher	1
VM 714	Preventive Medicine	To provide understanding of disease risk and causation to develop practical and effective strategies for prevention and protection	Dr. Ashley Hill	5
VM722	Veterinary Pharmacology	Basic and clinical pharmacology, therapeutic practice, & pharmacy management	Dr. Robert Jones	4
VM 724	Bioanalytical Pathology	Mechanisms, interpretation, and applications of laboratory analyses for solving diagnostic problems	Dr. Mary Anna Thrall	6
VM 741	Biology of Disease II	Pathogenesis of toxicologic/metabolic and immune-mediated diseases; systemic pathology	Dr. Patricia Schultheiss	4
VM 751	Veterinary Clinical Toxicology	Pathophysiology, epidemiology, diagnosis and treatment of plant and chemical intoxicant diseases of animals	Dr. Tony Knight	1

YEAR 2 FALL SEMESTER ELECTIVES				
VM707	Emerging Issues in Infectious Disease	Influence of microbial, host, and environmental changes on the emergence, control, and prevention of infectious disease of veterinary importance.	Dr. K. Pabilonia	1
BA 205	Fundamentals of Accounting	Designed to provide non-business majors with a basic understanding of financial accounting and an introduction to managerial accounting.	TBD	3
BN 305	Fundamentals of Management	Managerial process of planning, directing and controlling inputs of an organization. Analysis, decision-making, and survey of research literature.	TBD	3

Year 2 - Spring Semester

Course #	Course Name	Description	Coordinator	Credits
VM 726	Principles of Imaging Interpretation I	Clinical indications and interpretation for imaging modalities in examination of body systems	Dr. Susan Kraft	2
VM730	Applied Animal Behavior	Behaviors of domestic animals with emphasis on safe handling, diagnostic evaluations, and modification through training, medication, or surgery	Dr. Jennie Willis Jamtgaard	2
VM733	Principles of Surgery	Surgery principles and terminology	Dr. Erick Egger	2
VM737	Principles of Anesthesia	Anesthesia principles and techniques	Dr. Peter Hellyer	3
VM 742	Biology of Disease III	Pathogenesis of disease in organ systems, systemic pathology	Dr. Patricia Schultheiss	1
VM 744	Theriogenology	Reproductive function and disease, including mammary gland and endocrine regulation of reproduction and lactation	Dr. Pat McCue	3
VM 745	Clinical Sciences I	Diagnostic approaches to common medical problems of digestive-hepatic and endocrine systems	Dr. David Twedt	5
VM 747	Clinical Sciences II	Diagnostic approaches to common medical problems of cardiovascular and respiratory systems	Dr. Chris Orton	4

YEAR 2 SPRING ELECTIVES				
AN 445	Foaling Management	Care of the peripartum mare, facilitation of birth, and care of the newborn foal.	Dr. Pat McCue	2
BF 305	Fundamentals of Finance	Role of finance in management of the firm; role, structure of financial markets and institutions, valuation of basic securities	TBD	3
BGCC205	Legal/Ethical Issues Business	Legal environment of business including norms, rules, laws, ethical principles and values central to public life in the conduct of business	TBD	3
VM796F	Problem-Based Learning	Group study in small animal diagnostic problems; learning to solve small animal clinical problems	Dr. Regina Schoenfeld-Tacher	1

YEAR 3 - Fall Semester

Course #	Course Name	Description	Coordinator	Credits
VM 728	Principles of Imaging Interpretation II	Clinical imaging techniques used in the diagnosis of specific diseases of organ systems.	Dr. Robert Wrigley	2
VM749	Clinical Sciences III	Diagnostic Approaches to Common Medical Problems of Organ Systems	Drs. L. Klopp and Hendrickson	5
VM 753	Clinical Sciences IV	Diagnostic approaches to common medical problems of organ systems	Dr. Cynthia Powell	5
VM786AV	Junior Practicum	A series of one-week laboratories and clinical rotations	Dr. Cynthia Powell	6
VM796F	Small Animal Diagnostic Problems	Group study in small animal diagnostic problems; learning to solve small animal clinical problems	Dr. Regina Schoenfeld-Tacher	1
YEAR 3 FALL ELECTIVES				
Course #	**Course Name**	**Description**	**Coordinator**	**Credits**
VM720	Alternative and Complementary Therapeutics	Mechanisms and efficacy of alternative and complementary therapeutics used in veterinary medicine.	Dr. Narda Robinson	1
VM778A	Non-Mammalian Vertebrate Medicine	Diagnosis and treatment of diseases of avian and exotic animals.	Dr. Terry Campbell	2
VM796J	Swine Medicine	A basic overview of swine production and marketing	Dr. David Van Metre	1
VM796R	Food Animal Clinical Problems	Food animal medicine and diagnosis	Dr. Rob Callan	3
BK305	Fundamentals of Marketing	Overview of marketing activities involved in provision of products and services to consumers, including target markets and managerial aspects	TBD	3

YEAR 3 - Spring Semester

Course #	Course Name	Description	Coordinator	Credits
VM 712	Practice Management and Professional Development	Veterinary practice management topics including marketing finance, information systems, personnel issues and client relations	TBD	3
VM786AV	Junior Practicum	A series of one-week laboratories and clinical rotations	Dr. Cynthia Powell	8

LECTURE COURSES FOR TRACKS AND ELECTIVES				
Course #	**Course Name**	**Description**	**Coordinator**	**Credits**
Small Animal Track				
VM 773	Small Animal Medicine and Surgery I	Health management, and diagnosis and treatment of diseases of dogs and cats	Drs. Jan Bright & Regina Schoenfeld-Tacher	4
VM 774	Small Animal Medicine and Surgery II	Diagnostic approaches to common medical problems of neurologic, respiratory and musculoskeletal systems	Dr. Kristy Dowers	4
Large Animal Practice Track				
VM 757	Bovine Herd Medicine	Health management, and diagnosis and treatment of diseases of food animals	Dr. Page Dinsmore	3
VM 763	Equine Medicine and Surgery I	Health management, and diagnosis and treatment of diseases of horses	Drs. D. Hendrickson & R. Schoenfeld-Tacher	5
ELECTIVES				
VM778B	Biology & Disease of Small Mammals	Diagnosis and treatment of diseases of selected species of animals.	Dr. Sue VandeWoude	2
VM778D	Special Animal Medicine – Small Ruminants & Camelids	Diagnosis and treatment of diseases of small ruminants and camelids	Dr. David Van Metre & Dr. Jennifer MacLeay	2

Senior Practicum, Effective 2006-2007

General Track Core Rotations		Short Description
ANES	Anesthesia	Students in this rotation will perform physical examinations, examine laboratory data, and consider patient history in the creation of anesthesia protocols. **3 weeks.**
CCU	Critical and Emergency Care in Small Animals	Students will utilize newer technologies and skills, in order to monitor, diagnose, and provide superior patient care to animals with acute or chronic illnesses. Includes 3 weeks of CCS duty and 1 week of Daytime Emergency Receiving duty. **4 weeks.**
CPGEN	Community Practice and Spay/Neuter	Community Practice and Spay/Neuter is designed to provide the student with an opportunity to evaluate typical cases seen in private practice. Includes preventative health appointments, non-referred, non-emergency appointments, elective surgery and basic dentistry. Emphasis is placed on quality medicine and surgery, efficient case management and client education. Topic rounds include vaccinology, behavior, preventive & shelter medicine, and surgical principles. **2 weeks.**
DIAGIM	Diagnostic Imaging	Review basic principles of imaging technique and insure a working knowledge of imaging equipment, positioning animals, & technique for finished radiographs. **3 weeks.**
EQF	Equine Field Service	This rotation is to give the student the opportunity to participate in practice oriented diagnostic and therapeutic procedures. **1 week.**
EQM	Equine Medicine	students will have the opportunity to perform, time and cases permitting, various special diagnostic procedures. **2 weeks.**
EQS	Equine Lameness and Surgery	Lameness evaluation, diagnosis, and development of treatment plan for musculoskeletal problems. **3 weeks.**
FAF	Food Animal Field	This rotation will provide experience with on the farm problems of dairy cattle. **2 weeks.**
FAM	Food Animal Medicine	provides experience in the various aspect of diagnosis and treatment of spontaneous medical and surgical problems in individual food animals. **2 weeks.**
INTMED	Small Animal Internal Medicine	Will participate in teaching rounds, patient receiving and will have in-patient case responsibilities. **2 weeks.**
LAEM	Large Animal Emergency Medicine	Provide intensive care and monitoring of all large animal inpatients and receive all nighttime large animal emergencies. **2 weeks.**
ONC	Oncology	Students will have the opportunity to evaluate, diagnose, and manage relatively complex cases utilizing skills and knowledge in all aspects of internal medicine, surgery and radiation therapy. **2 weeks.**
PMORT	Postmortem Diagnosis	Student will gain additional experience in postmortem diagnostic techniques, interpretation and strategy. **2 weeks.**
SURG A	Small Animal Orthopedic Surgery	The student will participate in patient evaluation, diagnostic work-up, rounds discussions, emergency after-hours coverage of surgical patients and client communication. **1 week.**
SURG B	Small Animal Soft Tissue Surgery	The student will participate in patient evaluation, diagnostic work-up, rounds discussions, emergency after-hours coverage of surgical patients and client communication. **1 week.**
	Extra Large Animal rotation	**1 week.**
	Required Electives for GEN track: 5 weeks	**Allowed vacation for GEN track: 10 weeks**

Large Animal Track Core Rotations		Short Description
ANES	Anesthesia	Students in this rotation will perform physical examinations, examine laboratory data, and consider patient history in the creation of anesthesia protocols. **3 weeks.**
DIAGIM	Diagnostic Imaging	Review basic principles of imaging technique and insure a working knowledge of imaging equipment. Positioning of animals, technical factors on finished radiographs. **3 weeks.**
EQF	Equine Field Service	This rotation is to give the student the opportunity to participate in practice oriented diagnostic and therapeutic procedures. **2 weeks.**
EQM	Equine Medicine	students will have the opportunity to perform, time and cases permitting, various special diagnostic procedures. **2 weeks.**
EQS	Equine Lameness and Surgery	Lameness evaluation, diagnosis, and development of treatment plan for musculoskeletal problems. **2 weeks.**
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EQS	Equine Lameness and Surgery	Lameness evaluation, diagnosis, and development of treatment plan for musculoskeletal problems. **2 weeks.**
FAF	Food Animal Field	This rotation will provide experience with on the farm problems of dairy cattle. **2 weeks.**
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FAM	Food Animal Medicine	provides experience in the various aspect of diagnosis and treatment of spontaneous medical and surgical problems in individual food animals. **2 weeks.**
FAM	Food Animal Medicine	provides experience in the various aspect of diagnosis and treatment of spontaneous medical and surgical problems in individual food animals. **2 weeks.**
INTMED	Small Animal Internal Medicine	Will participate in teaching rounds, patient receiving and will have in-patient case responsibilities. **2 weeks.**
LAEM	Large Animal Emergency Medicine	Provide intensive care and monitoring of all large animal inpatients and receive all nighttime large animal emergencies. **2 weeks.**
PMORT	Postmortem Diagnosis	Student will gain additional experience in postmortem diagnostic techniques, interpretation and strategy. **2 weeks.**
	Extra Large Animal rotation	**1 week.**
	Required Electives for LA track: 7 weeks	**Allowed vacation for LA track: 10 weeks**

Small Animal Track Core Rotations		Short Description
ANES	Anesthesia	Students in this rotation will perform physical examinations, examine laboratory data, and consider patient history in the creation of anesthesia protocols. **3 weeks.**
CARD	Cardiology	This rotation will provide students with the opportunity to receive and manage small and large animal cardiology cases through the clinical cardiology service. **1 week.**
CCU	Critical and Emergency Care in Small Animals	Students will utilize newer technologies and skills, in order to monitor, diagnose, and provide superior patient care to animals with acute or chronic illnesses. Includes 3 weeks of CCS duty and 1 week of Daytime Emergency Receiving duty. **4 weeks.**
CP	Community Practice: Neuter, Dentistry, and Community Practice	Small Animal Core Only-Rotating between Neuter/Spay, Dentistry, and Community Practice **4 weeks.**
DERM	Dermatology	Emphasis will be placed on a problem-oriented approach to diagnosis and therapy of dermatological disorders in all species (including large animals). **2 weeks.**
DIAGIM	Diagnostic Imaging	Review basic principles of imaging technique and insure a working knowledge of imaging equipment. Positioning of animals, technical factors on finished radiographs. **3 weeks.**
INTMED	Small Animal Internal Medicine	Will participate in teaching rounds, patient and emergency receiving and will have in-patient case responsibilities. **3 weeks.**
NEUR	Neurology	Species are mainly small animal---participate in patient receiving, rounds discussions, and neurological consultative examinations, and will have in-patient case responsibilities. **2 weeks.**
ONC	Oncology	Students will have the opportunity to evaluate, diagnose, and manage relatively complex cases utilizing skills and knowledge in all aspects of internal medicine, surgery and radiation therapy. **2 weeks.**
OPHTH	Clinical Ophthalmology	Students participate in patient receiving and ocular surgery. **2 weeks.**
PMORT	Postmortem Diagnosis	Student will gain additional experience in postmortem diagnostic techniques, interpretation and strategy. **2 weeks.**
SURG A	Small Animal Orthopedic Surgery	The student will participate in patient evaluation, diagnostic work-up, rounds discussions, emergency after-hours coverage of surgical patients and client communication. **2 weeks.**
SURG B	Small Animal Soft Tissue Surgery	The student will participate in patient evaluation, diagnostic work-up, rounds discussions, emergency after-hours coverage of surgical patients and client communication. **2 weeks.**
	Large Animal rotation	**1 week.**
	Required Electives for SA track: 5 weeks	**Allowed vacation for SA track: 10 weeks**