Clinical Pharmacology, VETM 4420
Fall/Winter 2017-2018
0.25 Credits

Calendar

The Phase 3 Clinical Pharmacology course stresses rational drug therapy through an integrated understanding of drug factors, host factors and disease factors, with emphasis on clinically relevant properties of selected major drug classes used for therapy (prevention and treatment) in small animals, food animals, and horses. Drug-related factors including indications, mechanisms of action, major adverse effects and relevant pharmacokinetics will be emphasised in discussions of clinical uses of anti-inflammatory and anti-infective drugs and drugs acting on specific organ systems. Attention will also be given to other pertinent areas of clinical pharmacology. Prerequisites: all DVM Phase 2 courses; Co-requisites: all DVM Phase 3 courses. This course will be delivered through the Department of Biomedical Sciences.

Course

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Instructors

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Administrative

For questions regarding academic consideration, continuation of study, academic misconduct, safety, confidentiality, and experiential learning involving use of animals, please refer to the Phase information on the OVC website.
Course Objectives

The goals of this course are to ensure an understanding of current knowledge and use strategies of the important members of major therapeutic drug classes. Further, an understanding of host and disease factors will be integrated with drug factors reinforcing the principles of rational use of therapeutic agents in clinical situations. The drugs addressed will be those most important in the prevention and treatment of disease in small animals, food animals, and horses, and will include discussion of mechanisms of action, adverse effects, relevant pharmacokinetics, clinical indications and regulatory considerations.

Agents used in the management of inflammation and infections, and drugs acting more specifically on the respiratory, cardiovascular, digestive, endocrine, musculoskeletal and genitourinary systems will be described, as will agents used to treat cancer and diseases of the eyes and skin. Where possible, subject matter presented in this course will coincide (timely manner) with diseases of specific organs systems discussed in the three major species courses of Phase 3; i.e. Medicine and Surgery of the Dog and Cat (VETM*4470), Equine Medicine and Surgery (VETM*4450), and Food Animal Medicine and Surgery (VETM*4460).

Course Description

After successful completion of this course the student will be able to:

1. Define and correctly use the vocabulary common to veterinary clinical pharmacology.
2. Understand the principles of rational drug therapy including host, drug and disease factors.
3. Name the important and common drugs used to prevent and treat important disorders of small animals, horses, and food animals.
4. Explain the mechanism of action, therapeutic benefits, potential toxicity, indications, major contraindications and regulatory concerns of selected members of major drug groups in small animals, horses, and food animals.
5. Understand extra-label drug use and its implications in small animals, horses and food animals.
6. Know which drugs are prohibited for use in food animals.
7. Understand the components of the dosage regimen and how they are affected by host, drug and disease factors.
8. Understand prudent usage of antimicrobials.

Evaluation

Term tests include two midterm (formative) examinations worth 20% of the final grade each, and a final (summative) examination worth 60% of the final grade.

Resources

Notes will be available on D2L.