Veterinary Toxicology (3 education credits (CFUs); 45 hours; 29 frontal lessons and 4 hours of practical sessions x 4 groups of students)

Course training objectives: on completing the course students will have acquired a knowledge of the etiological, kinetic, dynamic, symptomatological and post-mortem aspects of xenobiotics of diverse origin causing toxicity in animals with a view to enacting treatment. EU laws governing xenobiotic residues in products of animal origin will also be dealt with during the course.

Lessons

Subjects and skills acquired	Topics	Specific contents	Hours
1. THE PROBLEM OF XENOBIOTIC RESIDUES	**Reg. CE 470/2009**	The concept of residue and zero-residue; ADI, NOEL, SF. Correlation between ADI and MRL.	2
	Withdrawal period	Experimental calculation of withdrawal period	0.5
	2010 National Residues Plan (PNR)	Aims and implementation of the National Residues Plan (PNR). Programming tables	1
2. APPROACH TO POISONING		Correct clinical approach to sustain vital functions (ABCDEF).	1
	Treatment	Decontamination (external antidotes, hemetics, purges, gastric lavage, rumenotomy)	1.5
		Specific treatment (internal antidotes)	1
3. TOXINs [*acquisition of: a) source of the toxin; b) toxic mechanism of action; c) clinical signs; d) treatment*]	**Seizure-inducing agents**	Strychnine Metaldehyde	1 1
	Insecticides	Organophosphates and carbamates Pyrethrins and Pyrethroids Imidacloprid Fipronil Amitraz Organochlorides	2 1 0.5 0.5 0.5 0.5
	Household products		
		Caustic and corrosive detergents	0.5
		Ethylene Glycol	1
		Aspirin and paracetamol (cat) Chocolate (dog)	1 1
	Anticoagulant rodenticides		2
	Mycotoxins	Aflatoxins	1
		Zearalenone	0.5
	Toxic Plants	Parasympatholytic plants (atropine)	1

		Nicotiana Tabacum	0.5
	Toxic metals	Lead	2
	Herbicides	Paraquat	0.5
	Animal venom	Viper Processionary caterpillar	1

Practical Sessions			
Subjects and skill acquired	**Topics**	**Specific Contents**	**Hours**
5. ABILITY TO REASON, DEDUCE AND VERIFY [*acquisition of: a) ability to observe clinical signs of animal poisoning; b) ability to calculate correct drug doses; c) verify the effectiveness of certain external antidotes*]	***Analysis of antibiotics in molk for MRL***	SNAP test	1
		CHARM test	1
	Pharmacological and toxicological calculations	Drug dilution exercises Preparation the main solutions (e.g. saline solution) Calculating the right drug dose to administer to the animal.	1.5
		Calculate likely MRL values starting from ADI readings.	0.5
	External Antidotes	Activated carbon Starch	
		Milk Albuminous water	1
		Soap Tincture of iodine	
		Tannin Potassium permanganate	