Avian Diseases Syllabus

Avian diseases (3 CFU; 30 hours of lectures; 6 hours of seminars)			
Learning objectives of the course: At the end of the course, students will acquire the basics of setting up a correct biosecurity and vaccination prophylaxis plan in an intensive poultry farm and knowledge of the main poultry diseases. The course knowledge combined with the activities that will be carried out in the avian pathology professional practical training will provide the student with the ability to set up a clinical necropsy and laboratory diagnostic investigation.			
Lectures			
Skills acquired	**Topics**	**Specific contents**	**Hours**
DIRECT AND INDIRECT PROPHYLAXIS IN POULTRY FARMING (2 HOURS) [*Acquisition of: a) basic knowledge on direct prophylaxis; b) ability to set up biosecurity and vaccination plans*]	***Biosecurity***	Structural, logistical, managerial and behavioural direct prophylactic measures aimed at limiting the introduction and spread of infections in the farm.	1
	Vaccinations	Live attenuated and inactivated vaccines. Main vaccine application methods. Criteria for drawing up a vaccination plan.	1
1. MAIN BACTERIAL DISEASES AFFECTING POULTRY (9 HOURS) *[For each bacterial disease, acquisition of:* *(a) knowledge of aetiology, epidemiology, pathogenesis, diagnosis and prophylaxis;* *(b) ability to recognise clinical signs and specific anatomo-pathological lesions.*]	***Avian tuberculosis***	Avian tuberculosis – aetiology, clinical signs, anatomo-pathological lesions, and diagnosis.	1
	Colibacillosis	Colisepticemia, Colibacillosis in neonatal chicks, Colibacillosis in layers, Coligranulomatosis and other clinical forms caused by E. Coli.	2
	Avian salmonellosis	Avian pullurosis Fowl tyhpoid Arizonosis and Paratyphoid Aetiology, pathogenesis, anatomo-pathological lesions, clinical signs, diagnosis and prophylaxis.	3
	Pasteurellosis	Avian cholera, Riemerella anatipestifer and Ornitobacterium rinotrachaele infections – Aetiology, anatomo-pathological lesions, clinical signs, diagnosis and prophylaxis.	1
	Mycoplasma infections	Mycoplasma gallisepticum, Mycoplasma synoviae, Mycoplasma meleagridis e Mycoplasma iowae infections. Aetiology, pathogenesis, anatomo-pathological lesions, clinical signs, diagnosis and prophylaxis.	2

2. MAIN VIRAL DISEASES AFFECTING POULTRY (15 HOURS) *[For each viral disease, acquisition of:* *(a) knowledge of aetiology, epidemiology, pathogenesis, diagnosis and prophylaxis;* *(b) ability to recognise clinical signs and specific anatomo-pathological lesions.]*	***Viral neoplastic diseases***	Marek's disease - Aetiology, pathogenesis, anatomo-pathological lesions, clinical signs, diagnosis and prophylaxis.	2
	Paramyxoviridae and pneumoviridae infections	Newcastle disease - Aetiology, pathogenesis, anatomo-pathological lesions, clinical signs, diagnosis and prophylaxis.	2
		Avian metapneumovirus infection	1
	Coronaviruses	Infectious bronchitis - Aetiology, pathogenesis, anatomo-pathological lesions, clinical forms, diagnosis and prophylaxis.	2
	Immunosuppressive diseases	Gumboro disease - Aetiology, pathogenesis, anatomo-pathological lesions, clinical signs, diagnosis and prophylaxis. Chicken infectious anemia - Aetiology, pathogenesis, anatomo-pathological lesions, clinical signs, diagnosis and prophylaxis.	2
	Infectious laryngotracheitis	Infectious laryngotracheitis - Aetiology, pathogenesis, anatomo-pathological lesions, clinical signs, diagnosis and prophylaxis.	1
	Fowl pox	Fowl pox - Aetiology, pathogenesis, anatomo-pathological lesions, clinical signs, diagnosis and prophylaxis.	1
	Adenovirus infections	Haemorrhagic enteritis, Egg drop syndrome and other adenovirus diseases	2
	Avian influenza	Avian influenza - Aetiology, pathogenesis, anatomo-pathological lesions, clinical signs, diagnosis and prophylaxis.	2
3. MAIN PARASITIC DISEASES AFFECTING POULTRY (4 HOURS)	***Coccidiosis***	Chicken coccidiosis. Coccidiosis of other domestic poultry species - aetiology, cycle, clinical signs, anatomo-pathological lesions, diagnosis and prophylaxis.	2

[For each parasitosis, acquisition of: *(a) knowledge of aetiology, epidemiology, pathogenesis, diagnosis and prophylaxis;* *(b) ability to recognise clinical symptoms and specific anatomo-pathological lesions;* *(c) ability to recognise the parasites involved*	***Other diseases caused by protozoa, helminths, mites and insects***	Histomoniasis and trichomoniasis. Capillariasis, ascaridiasis, teniasis, oxyuriasis and syngamiasis. Dermanissic acariasis Tapeworms. Mallophagus infestation.	2

Seminars

Skills acquired	Topics	Specific contents	Hours
INSIGHT INTO INDIRECT PROPHYLAXIS IN POULTRY FARMING Acquisition of skills in setting up biosecurity and vaccination plans	***BIOSECURITY AND VACCINE PROPHYLAXIS***	Practical applications of biosecurity and vaccine prophylaxis	3
BACTERIAL DISEASES AFFECTING POULTRY *Acquisition of skills in differential diagnosis of bacterial diseases*	***BACTERIAL DISEASES***	Differential diagnoses of bacterial diseases	1
VIRAL DISEASES AFFECTING POULTRY *Acquisition of skills in diagnosis of viral diseases*	***VIRAL DISEASES***	Diagnosis of viral diseases	2