Inspection, Control and Certification of Food Products (cod. 58194) Module 1. Meat and egg inspection (2 CFU) Prof. Marcello Trevisani

LECTURES (20 hours)

Topics and skills to learn	Topics covered	Specific contents	Hour
1. INTRODUCTION TO THE COURSE	Teaching methodology and procedures for the evaluation of acquired skills	Teaching methods Contents and study material Profit evaluation method	1
2. FUNDAMENTAL KNOWLEDGE Student will acquire the basic knowledges to understand the methods and techniques of official control of meat and eggs	Public health, consumer protection and development of the current food control system	Origini ed evoluzione dell'ispezione delle carni Ambito dell'ispezione delle carni	1
	Meat quality, animal health and welfare	Minimum standards for the protection of farm animals during transport, stopping before slaughter and stunning Anomalies and injuries related to animal	1
		Transport of animals: checks, vehicles, procedures and planning	1
		Stunning animals: restraint systems, stunning methods, signs of correct stunning and fault management	1

	1		
3. ANTE MORTEM INSPECTION		Purpose, scope and methodology	2
Students will acquire the methodology to perform		Typical signs of diseases classified in OIE list A.	
the ante-mortem inspection; they will learn what are the signs and		Zoonoses detectable at the ante-mortem examination	
symptoms of the diseases or conditions specified in the regulations that make the animal unfit for human food for reasons of animal or public health.	Ante-mortem inspection	Animal cleaning. Animal welfare checks and diseases associated with the transport of animals for slaughter	2
Students must be able to arrange a slaughter with special precautions, delayed, separated or slaughter and destruction. Student have to know how to manage emergency slaughter (outside the slaughterhouse).		Criteria for arranging slaughter with special precautions, delayed, separated or slaughter and destruction.	
4. EVALUATION OF CHEMICAL RISK AT SLAUGHTER		Residues and Contaminants Monitoring Plans	2
Students will be provided information about the		Risk factors related to the farms' health management	
national data collection systems (National Residues	Inspection system based on the HACCP system:	Extra-label drug uses	
and Samples Plan in suspected cases). Students will learn to orientate controls and implement measures to correct compliance violations.	measures to prevent the dangers associated with the presence of environmental contaminants and drug residues Information on the Food Chain and Legislative Decree 158/2006	Inspection findings (ante and post mortem) and pharmaco- surveillance to target the groups of animals/gender/age combinations and Confirmatory Testing for Suspects	
		Fraudulent use of anabolic steroids and veterinary drugs. Control procedures	1

5. POST-MORTEM INSPECTION Students will acquire the methodology to perform post-mortem inspection of carcasses and organs; they will learn to recognize anomalies and signs of diseases and other disorders that makes meat unfit for human consumption. Students must be able to arrange assessments and report inspection findings	Post-mortem inspection	Procedures for postmortem inspection of domestic ungulate mammals (organs and carcasses) Documentation of the main parasitic and microbial diseases detectable in postmortem examination and criteria to be adopted for decisions regarding the meat Transmissible Spongiform Encephalopathies and management of specified risk material	3
6. COMPLEMENTARY EXAMINATIONS TO MEAT INSPECTION Students will learn how rapid analysis methods are used to decide if meat is unfit for human consumption	Complementary laboratory tests	Trichinoscopic examination Multi-residual methods for drug residue research Bacteriological examination of meat Boar smell in pork Histological examination of accessory sex glands	1
7. OFFICIAL CONTROLS The students learn how Veterinary Officers perform official control duties in the meat and egg industries and the criteria for the authorization of production plants	Guidelines for official control pursuant to the regulations CE / 882/2004 and CE / 854/2004	General organization of official controls in slaughterhouses Control planning Control methods and techniques: audits, inspections, monitoring, verifications, interviews, samplings	2

8. HEALTH AND QUALITY CONTROLS OF EGGS AND OVOPRODUCTS	Controls on the production and marketing of eggs and egg products	Regulatory provisions Inspection: quality defects and anomalies of eggs (visible on the candling) and external (shell). Dirty and soiled eggs. Use of artificial dyes in feeding the hens. Hygienic and health problems related to the production and placing on the market of egg products	2
CASE STUDY WORKSHOPS			
ANTE-MORTEM INSPECTION CASES	Documentation with videos and images of inspection procedures and the main and most common findings of ante-mortem inspection	Practical way of creating differential diagnoses throught structured thinking process	2
2. POST-MORTEM INSPECTION CASES	Documentation with videos and images of inspection procedures and of the main and most common findings of post-mortem inspection	Documentation of the main parasitic and microbial diseases detectable in postmortem examination and criteria to be adopted for decisions regarding the meat	2