

VETERINARY PERINATOLOGY**(2 CFU; 24 hours: teaching 15 hours; practical classes 9 [x4] hours)****Objectives:**

at the end of the course the student acquires the knowledge to diagnose and treat the main perinatal diseases, in particular in the equine species and in small animals

TEACHING

Topics and skill acquired	Topics	Specific content	Hour
1. INTRODUCTION TO PERINATOLOGY (1 HOUR) [acquisition of: a) correct terminology; b) concepts of anatomy and physiology of the prenatal period]	Introduction, anatomy and physiology	1- Introduction to the course: definition of perinatology and neonatology and importance in different species. Course illustration: syllabus, internship, exam methods, textbooks. Review of some notions of anatomy and physiology as a function of the main perinatal pathologies: the duration of pregnancy in different species, the different types of placenta in domestic animals, physiology of placental exchanges, anatomy and function of fetal annexes (amnios, allantois and chorion), umbilical cord and fetal circulation, functions of amniotic fluid.	1
2. GENERAL PART (8 HOURS) [acquisition of: a) ability to diagnose and monitor a high-risk pregnancy; (b) ability to take care of the healthy newborn and to perform resuscitation; (d) ability to prevent, diagnose and treat FPT; (e) ability to perform a clinical examination of a sick newborn and to stabilise it]	Prevention of perinatal diseases	2- Health and well-being of the mother; environmental management; pregnancy monitoring.	1,5
		3- Attending parturition, care of the healthy newborn, neonatal resuscitation.	1,5
		4- Passive Transfer of immunity and importance of colostrum. Prevention, diagnosis and treatment of failure of passive transfer immunity (FPT).	1
	Diagnostic-therapeutic protocol in the sick neonate	5- The diagnostic protocol in the sick neonate: clinical examination and collaterals; emergency protocol in the critically ill neonate.	2
6- The therapeutic protocol and the principles of neonatal intensive care: respiratory support, fluid therapy, antibiotic therapy, gastroprotection, assisted enteral nutrition and parenteral nutrition, other supportive care and monitoring.		2	
3. SPECIAL PART – PUPPY AND KITTEN (1 HOUR) [acquisition of: ability to prevent, diagnose and treat the main diseases of puppy and kitten]	Puppy and kitten diseases	7- Main neonatal diseases (perinatal asphyxia, maternal and environmental diseases, congenital anomalies, infectious and parasitic diseases, haemorrhagic syndrome, organic wasting syndrome, neonatal isoerythrolysis, parasitosis and trauma): pathogenesis, diagnosis and therapy.	1

4. SPECIAL PART – FOAL (4 HOURS) [acquisition of: ability to prevent, diagnose and treat the main diseases of the foal]	Foal diseases	8- Perinatal Asphyxia Syndrome (PAS): pathogenesis, diagnosis and treatment.	1,5
		9- Prematurity and dismaturity: definitions, causes, diagnosis and therapy.	0,5
		10- Perinatal infections: placentitis, neonatal septicemia, main localized infections (enteritis, pneumonia, arthritis-osteomyelitis): pathogenesis, diagnosis and therapy.	2

5. SPECIAL PART – CALF (1 HOUR) [acquisition of: ability to prevent, diagnose and treat the main diseases of the calf]	Calf diseases	11- Main diseases of the calf: perinatal hypoxia; RDS; pathologies of umbilical remnants; neonatal pneumonia; neonatal gastroenteritis.	1
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PRACTICAL CLASSES			
Topics and skill acquired	Topics	Specific content	Hour
5. ABILITY TO OBSERVE, DEDUCE AND RECOGNIZE (TOT. 9 ORE) [acquisition of: a) ability to perform clinical examination and ultrasound examination of the pregnant mare; b) ability to perform and interpret the macroscopic examination of the equine placenta; c) ability to discuss a clinical case]	Perinatology	Transrectal and transabdominal ultrasound examination of pregnant mares	2
		Materials for the care and assistance of mother and newborn in the peripartum	2
		Gross evaluation of the normal and abnormal placenta	2
		Interactive discussion of clinical cases. Flip classroom on the following topics: 12- Neonatal isoerythrolysis: pathogenesis, diagnosis, therapy and prevention. 13- Main diseases of the urinary tract and umbilicus (patent urachus, omphalitis, distal urinary tract rupture and uroperitoneum): pathogenesis, diagnosis and therapy. 14- Main gastro-enteric diseases: (paralytic ileus, invagination, meconium retention and constipation, gastro-duodenal ulcers, intestinal parasitosis): pathogenesis, diagnosis and therapy.	3