

**OBSTETRIC CLINIC, ANDROLOGY AND VETERINARY
GYNAECOLOGY**

(5 CFU; 60 hr: 40 hr theory; 20 practical exercise)

Learning objectives:

- basic knowledge of how to: perform an obstetric-gynaecological and andrological examination; carry out collateral exams; make a diagnosis and set up appropriate therapy about the different pathologies concerning male and female reproductive system.
- Information is provided on how to manage non pathological situations such as induced abortion; oestrus cycle suppression; pregnancy diagnosis; appropriate timing for natural mating or artificial insemination.
 - Breeding soundness evaluation in different domestic species

Theoretical lessons

Acquired skills	Arguments	Specific topics	Hours
1. Course presentation: basic knowledge to approach the course (TOT.1 HR)		Course presentation; program; Professor; didactic methods; suggested books; final exam	1
2. Special reproductive examination (TOT. 2 HR) [acquisition of: a) Ability to perform an obstetric-gynaecological or andrological examination	Obstetric-gynaecological examination	History, reproductive clinical examination; appropriate collateral exams to achieve diagnosis or to evaluate female reproductive efficiency. Natural mating, sperm deposition and transit through female genital tract.	1
b) Ability to understand reproductive pathologies]	Andrological examination	History, reproductive clinical examination; appropriate collateral exams to achieve diagnosis or to evaluate male reproductive efficiency.	1

<p>3. embryonic development and placentation (TOT 1 HR)</p> <p>[acquisition of: a) Knowledge about embryonic development and foetus-maternal connexion]</p>	<p>Embryo development; embryonic and foetal phase</p>	<p>Embryonic and foetal development; maternal recognition of pregnancy; placentation; placental classification.</p>	<p>1</p>
<p>4. pathologies of non-pregnant female (TOT. 2 HR)</p> <p>[acquisition of: a) Knowledge about diagnosis; b) treatment]</p>	<p>Ovarian pathologies</p> <p>Uterine pathologies</p> <p>Vulvo-vaginal pathologies</p> <p>Mammary gland pathologies in dogs</p>	<p>Clinical and diagnostic characteristics. Therapy of principal congenital and acquired pathologies.</p>	<p>2</p>
<p>5. pathologies of pregnant female (TOT. 12 HR)</p> <p>[acquisition of: a) Knowledge about diagnosis; b) treatment]</p>	<p>Pregnancy pathologies</p> <p>Parturition pathologies</p> <p>Post-partum pathologies</p>	<p>Abnormalities of foetal adnexa and fluids; foetal or maternal pregnancy origins; pregnancy duration; clinical and diagnostic characteristics, therapy of principal congenital and acquired pathologies.</p> <p>Obstetrics techniques; foetal or maternal dystocia; clinical procedures on mother and foetus; injuries resulting from birth; diagnosis and treatment.</p> <p>Uterine atony; spasm; prolapse; retention of foetal adnexa; bacterial infectious disease; diagnosis and therapy.</p>	<p>12</p>

<p>6. parturition (TOT. 5 HR)</p> <p>[acquisition of: a) Steps of birth b) Induction of parturition: timing and methods c) Post-partum significance]</p>	<p>Normal birth and post-partum</p>	<p>Childbirth hygiene, pathways of childbirth, mechanism (s) of onset of childbirth, stages of childbirth: duration and characteristics, induction of birth. Definition of puerperium, events associated with the puerperium: uterine involution, resumption of ovarian activity, elimination bacterial contamination, endometrial regeneration, duration of the puerperium.</p>	<p>5</p>
<p>7. pregnancy diagnosis (TOT. 5 HR)</p> <p>[acquisition of: a) Different techniques b) Timing of pregnancy c) Normal and pathological characteristics d) Competence to perform obstetrical examination and for parturition assistance]</p>	<p>Pregnancy diagnosis techniques; specific obstetrical terminology; gynaecological examination.</p>	<p>The most used techniques (clinical, instrumental, laboratory diagnosis), parameters for the evaluation of a normal trend of the pregnancy, endocrinology associated and specific proteins in pregnancy, useful for timing Gestational age. Number of foetuses, twinning in uniparous species. Definition of presentation, position, attitude.</p>	<p>5</p>
<p>8. induction of abortus (TOT. 1 HR)</p> <p>[acquisition of: a) Techniques b) Pros and cons c) Collateral effects]</p>	<p>Techniques for induction of abortus</p>	<p>The most common treatments used in pets. When to use this procedure. The advantages and disadvantages of using the different techniques</p>	<p>1</p>

<p>9. induction prevention and suppression of ovarian activity (TOT. 1 HR)</p> <p>[acquisition of: a) Techniques b) Pros and cons c) Collateral effects]</p>	<p>Techniques for induction, prevention and suppression of oestrus</p>	<p>The most common treatments used in pets. Pros and cons of these procedures</p>	<p>1</p>
<p>10. assessment of ovulation and timing for mating (TOT 2 HR)</p> <p>[acquisition of: a) Techniques used for assessment of ovulation b) How to interpret results]</p>	<p>Assessment of ovulation</p>	<p>Vaginal cytology; dosing progesterone; vaginal endoscopy; timing for mating or AI</p>	<p>2</p>
<p>11- male reproductive pathologies (TOT 3 HR)</p> <p>[Acquisition of: a) Knowledge about diagnosis b) Therapy]</p>	<p>Penis pathologies</p> <p>Testicular pathologies</p> <p>Glands pathologies</p>	<p>Penis and prepuce lesions; orchitis; epididymitis; testicular thermoregulation and “summer infertility”. Glands lesions and pathologies. Clinical features, diagnosis and therapy of the main congenital and acquired pathologies.</p>	<p>3</p>
<p>12. Male and female infertility (TOT 5 HR)</p> <p>[Acquisition of: a) How to perform reproductive examination b) Correct diagnosis c) Treatment of infertility]</p>	<p>Infertility due to oestrous cycle pathologies</p> <p>Infertility due to unavailability to the mating</p>	<p>Clinical evaluation of female fertility and infertility treatment</p>	<p>3</p>

d) Disorder of sexual functions	Infertility due to incorrect management of mating		
	Infertility due to spermatic causes	Clinical evaluation of male fertility and infertility treatment	2
	Infertility due to erection disorders		
	Infertility due to ejaculation disorders	Behavioural abnormalities; disorders of ejaculation (original and functional). Diagnosis and treatment	
	Infertility due to mating disorders		

Practical exercise			
Acquired skills	Arguments	Specific topics	hours
<p>13. Special reproductive examination (TOT. 14 HR)</p> <p>[acquisition of: a) how to perform an obsteric-gynaecological or andrological examination;</p>	Obsetric-gynaecological examination	<p>Performing a special reproductive examination on a pet.</p> <p>Discussion on diagnosis</p> <p>Pregnancy diagnosis: clinical and by instruments.</p> <p>Obstetrical instruments: description and use.</p> <p>Dystocia resolution.</p> <p>Appropriate restraint and sedation during a reproductive evaluation.</p>	7

<p>b) how to collect anamnesis; to make a diagnosis and to provide an appropriate treatment</p> <p>c) how to write a report</p> <p>d) how to explain to the owners about health state of his pet]</p>	<p>Andrological examination</p>	<p>Local anaesthesia protocols. Select appropriate exams (ultrasonography). Provide therapy; write a report about examination and exams done; explain to the owner about health state of the patient.</p>	<p>7</p>
<p>14. discussion on clinical cases (TOT. 6 HR)</p> <p>[Acquisition of: a) critical analysis, communication, terminology skills on proposed clinical cases</p>	<p>Case discussion</p>	<p>Collegial discussion on clinical cases reported by Professor. Special focus on pathologies, collateral useful exams to define lesions. Try to make diagnosis and therapy; write a report and explain to the owner about health state of the patient.</p>	<p>6</p>