

Updated On	2024/03/21																																	
Curricular Year / Period	2023/24 / S2																																	
Course	Veterinary Nursing																																	
Curricular Unit	Complementary Diagnostic Methods																																	
Language(s) of Instruction	Português Inglês																																	
ECTS/tempo de trabalho (horas)	<table border="1"> <thead> <tr> <th>ECTS</th><th>Total</th><th colspan="9">Horas de contacto semestral</th></tr> <tr> <th>6</th><th>160</th><th>T</th><th>TP</th><th>PL</th><th>S</th><th>TC</th><th>E</th><th>O</th><th>OT</th><th>EC</th></tr> </thead> <tbody> <tr> <td></td><td></td><td>32</td><td>0</td><td>32</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></tr> </tbody> </table> <p>T - Theoretical; TP - Theoretical and practical; LP - Laboratory Practice; S - Seminar; TG - Tutorial guidance; FW - Fieldwork; T - Training; ; EC - Clinical teaching; O* - Other hours typified as Clinical Training under the Directive 77/453/EEC of June 27, adapted by Directive 2005/36/EC.</p>	ECTS	Total	Horas de contacto semestral									6	160	T	TP	PL	S	TC	E	O	OT	EC			32	0	32	0	0	0	0	0	0
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		32	0	32	0	0	0	0	0	0																								
Teacher in charge (GDPR consent) [complete name, email]	Tânia Salomé Dias Lagoa / tanielagoa@ipportalegre.pt																																	
Teacher in charge (GDPR consent) [complete name, email]	Manuela Bebiana Plácido Lourenço / manuelalourenco@ipportalegre.pt																																	
Prerequisites [Curricular Units that must precede and specific entry competences]	N/A																																	
Learning outcomes [Description of the overall and specific objectives] [Knowledge, skills and competences to be developed by students]	It is intended that the student understands the fundamentals of complementary diagnostic exams routinely used in Veterinary Medicine, becomes familiar with the equipment and is capable of performing or assisting in the execution of these exams. The student must also understand the basic principles of more sophisticated complementary exams, such as computed tomography, magnetic resonance imaging, scintigraphy and fluoroscopy. It is also intended that the student understands the indications and limitations of each technique, understands the professional risks involved and learns to prevent them.																																	
Sustainable Development Goals																																		
Syllabus	<p>Theoretical classes: 1) Presentation of the subject and planning. Radiology: introduction; 2) Radiology: continuation; 3) Contrast radiology; 4) Equine radiology; 5) Ultrasound; 6) Echocardiography; 8) Electrocardiography; 9) Blood pressure; 10) Endoscopy; 11) CT and fluoroscopy; 12) MRI; 13) Scintigraphy.</p> <p>Practical classes: 1) Presentation of the subject: practical component. Assessment methodology; 2) Radiology: Equipment and development; collimation. Kilovoltage and milliamperage; 3) Radiographic projection training: Small animals; 4) Clinical cases radiology: small animals; 5) Clinical radiology cases: equine; 6) Ultrasound: containment and preparation of the patient. Abdominal ultrasound; 7) Echocardiography: patient positioning and main sections; 8) Echocardiography: clinical cases; 10) ECG execution. ECG interpretation exercises and arrhythmia diagnosis; 11) Blood pressure; 12) Endoscopic decontamination; 13) Clinical cases of CT scan; 14) Clinical MRI cases; 15) PCR.</p>																																	
Teaching methodologies (including assessment) [Specify the types of assessment and the weights and evaluation criteria]	<p>1 - Teaching methodologies</p> <p>In theoretical classes, students acquire in the classroom the general knowledge and skills necessary to correctly manipulate devices for performing MCD, as well as the particularities of each method. In practical classes, students work in groups and practice carrying out some complementary diagnostic tests (radiography, ultrasound, electrocardiography, ecg, blood pressure).</p> <p>2 - Period assessment</p> <p>Continuous assessment: two frequencies to evaluate theoretical material (50%) and one practical frequency to evaluate practical material (50%). Attendance at 75% of practical classes is mandatory.</p>																																	

	<p>3 - Examination assesement</p> <p>Final written exam to evaluate theoretical material (50%) and final written exam to evaluate practical material (50%). Attendance at 75% of practical classes is mandatory.</p>
Bibliography	<p>1 - Main Bibliography</p> <p>Holloway A; Mc Connell F. (2013). BSAVA Manual of Canine and Feline Radiography and Radiology. (1st edition). British Small Animal Veterinary Association</p> <p>Thrall D E. (2013). Textbook of Veterinary Diagnostic Radiology. (6th edition). Missouri, Elsevier.</p> <p>Tempkin, B B (2015) Sonography Scanning : Principles and protocols (4ª edição) Missouri, Elsevier</p> <p>Bassett, J M.; Thomas, J A. (2014). Clinical Textbook for Veterinary Technicians. (8th edition). Elsevier Saunders.</p> <p>Orpet, H; Welsh, P. (2011). Handbook of Veterinary Nursing. (2nd edition). Wiley-Blackwell. Section 6.</p> <p>Moore, A.H; Rudd, S., 2008, Manual canine and feline advanced veterinary nursing, 2ª Edição, BSAVA</p> <p>Schmeltzer, L E; Norsworthy, G D (2012) Nursing the feline patient. EUA, Wiley-Blackwell</p> <p>2 - Complementary Bibliography</p> <p>Notes provided by the teacher.</p>
Special Situations [Students with special status]	<p>1 - Period assessment - Students with special status</p> <p>Continuous assessment: two frequencies to evaluate theoretical material (50%) and one practical frequency to evaluate practical material (50%). Students with special status are exempt from practical classes.</p> <p>2 - Examination assesement - Students with special status</p> <p>Final written exam to evaluate theoretical material (50%) and final written exam to evaluate practical material (50%). Students with special status are exempt from practical classes.</p>