## **Curricular Unit Form**





Updated On	2024/03/21										
Curricular Year / Period	2023/24 / S2										
Course	Veterinary Nursing										
Curricular Unit	Animal Reproduction and Obstetrics										
Language(s) of Instruction	Português Inglês										
ECTS/tempo de trabalho (horas)	ECTS	Total			Н	oras de	contacto	semestr	al		
	6	160	Т	TP	PL	S	тс	E	0	ОТ	EC
			32	0	32	0	0	0	0	0	0
	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.										
Teacher in charge (GDPR consent)  [complete name, email]	Elvira Matilla Pinto / elvirapinto@ipportalegre.pt										
Teacher in charge (GDPR consent)	Hélio Bruno Figueiredo Correia / heliocorreia@ipportalegre.pt										
[complete name, email]											
Prerequisites [Curricular Units that must precede and	N/A										
Learning outcomes  [Description of the overall and specific objectives] [Knowledge, skills and competences to be developed by students]	To provide scientific knowledge and technical methods for the correct interpretation of the physiological mechanisms of reproduction and obstetrics in companion animals, farm animals and equine. To give the students technical and scientific knowledge as well as working methods of obstetrical nursing in different animal species and their particularities. The students will acquire competences in the area of reproduction and obstetrical nursing in the different species. They will learn to assist the Veterinarian in the supervision of different phases of reproduction, pregnancy, lactation and parturition. To perform and monitor seminal exams and vaginal smears. To accompany and monitor the new-born, their recovery and lactation. To plan and register information about reproductive management.										
Sustainable Developemnt Goals											
Syllabus	Anatomy and physiology f the reproductive system of the male and female. Reproductive cycles and regulatory factors. Gestation, fertilization, embryonary development, implantation, placentation, parturition.  Equine reproduction: estric cycle physiology, gestation, breeding season in the mare, reproductive management, reproductive diseases, parturition. Main reproductive aspects in the stallion.  Reproduction in bovine: physiology, herd reproductive management, estrus control, reproductive diseases, parturition. The bull - main reproductive aspects, artificial insemination, embryo transfer.  Small ruminants reproduction: physiology, herd reproductive management, reproductive diseases, parturition, main reproductive aspects in the ram and billy goat.  Reproduction in swine: physiology, reproductive management, reproductive diseases, parturition, the male.  Canine reproduction: physiology, gestation, parturition, breeding management, reproductive diseases.  Feline reproduction: physiology, gestation, parturition, breeding management, reproductive diseases.										
Teaching methodologies (including assessment)  [Specify the types of assessment and the weights and evaluation criteria]	<ul> <li>1 - Teaching methodologies</li> <li>Theoretical classes: discussion, exemplification, ilustration.</li> <li>Practical classes: Practical clinical and laboratorial classes utilizing organs, citologic and hystologic stains, large animal practices and visits.</li> <li>2 - Period assessment</li> <li>Theoretical part (50%): two midterms (minimal grade of 10 on each)</li> </ul>										

## **Curricular Unit Form**





Practical part (50%): final exam (50%). Minimal grade: 10 3 - Examination assessement Theoretical part (50%): final exam (minimal grade of 10) Practical part (50%): final exam (50%). Minimal grade: 10 1 - Main Bibliography Manuais e apresentações do professor. Noakes, D. E., Parkinson, T. J., England, G. C. W. (2009) Veterinary reproduction and obstetrics. 9a edição, Saunders Elsevier, EUA. Hafez, E. S. E. e Hafez, B. (2003) Reproducción e Inseminación Artificial en Animales, 7ª Ed. McGraw-Hill. Interamericana. México. Akers, R. M., et al. (2013). Anatomy & Physiology of Domestic Animals. 2ª ed. Willey Blackwell Bassert, J M.; McCurnin, D. M. (2014). McCurnins: Clinical Textbook for Veterinary Technicians. (8th edition). Elsevier Saunders Tempkin, B. B., (2015), Sonography scanning principles and protocols. 4ª edição. Elsevier Saunders, EUA Reeder, D.; Miller, S.; Wilfong, D.; Leitch, M.; Zimmel, D. (2009) AAEVT's Equine Manual for Veterinary Technicians. Wiley-Blackwell. (Capítulo: Equine reproduction) Silva, C; Ortiz, J; Santos, R; Minas, M. (2020) Acompanhamento Reprodutivo em Éguas e Transferência de Embriões. ISBN: 978-989-8806-37-6 Carvalho, I, B; Guimarães, H; Cardoso, M; Pias, G; Silva, C; Lopes, L, S; Branco, S; Queiroga, C; **Bibliography** Bettencourt, E. (2022) Diagnóstico e Tratamento da Endometrite na Égua. ISBN: 978-972-778-299-4 2 - Complementary Bibliography Allen, W., E., (1999), Fertilidad y Obstetrícia Equina. Prestes, Nereu Carlos (2006). Obstetrícia Veterinária. Ed Guanabara Koogan, ISBN: 8527711850 Kustritz, M., V., R. (2010), Clinical canine and feline reproduction, Wiley-Blackwell, Iowa, EUA Etches, R.J., (1995). Reproduction in poultry. CABI Publishing, Wallingford, Reino Unido Noakes, D.E., Parkinson, T. e England, G., (2001). Arthur's veterinary reproduction and obstetrics. 8a Edição, W. B. Saunders Company, Filadélfia, EUA Senger, P.L. (2004). Pathways to pregnancy and parturition. 2ª Edição, Current Conceptions, Inc., Washington State University Research & Technology Park, Washington, EUA Youngquist, R.S. (1997). Current therapy in large animal theriogenology. W. B. Saunders Company, Filadélfia, EUA. McKinnon, A. O., Squires, E. L., Vaala W. E., Varner, D. D., (2011). Equine Reproduction. 2ª Edição. Wiley-Blackwell, EUA Recursos disponíveis na Biblioteca do Conhecimento On-line (b-On). 1 - Period assessment - Students with special status Theoretical part (50%): two midterms (minimal grade of 10 on each) Practical part (50%): final exam (50%). Minimal grade: 10 **Special Situations** [Students with special status] 2 - Examination assessement - Students with special status Theoretical part (50%): final exam (minimal grade of 10) Practical part (50%): final exam (50%). Minimal grade: 10