

Updated On	2021/10/28																																								
Curricular Year / Period	2021/22 / S1																																								
Course	Equinicultura																																								
Curricular Unit	Nutrição e Alimentação																																								
Language(s) of Instruction	Português Inglês (apoio tutorial a estudante ERASMUS+)																																								
ECTS/tempo de trabalho (horas)	<table border="1"> <thead> <tr> <th rowspan="2">ECTS</th> <th rowspan="2">Total</th> <th colspan="9">Horas de contacto semestral</th> </tr> <tr> <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>6</td> <td>180</td> <td>32</td> <td></td> <td>32</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></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									T	TP	PL	S	TC	E	O	OT	EC	6	180	32		32						
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Teacher in charge (GDPR consent) <small>[complete name, email]</small>	Carolina Maria Balão Da Silva / carolina.silva@ippportalegre.pt																																								
Other teachers (GDPR consent) <small>[complete name, email]</small>	Rute Isabel Duarte Guedes Dos Santos / rutesantos@ippportalegre.pt																																								
Prerequisites <small>[Curricular Units that must precede and specific entry competences]</small>	No																																								
Learning outcomes <small>[Description of the overall and specific objectives] [Knowledge, skills and competences to be developed by students]</small>	<p>The fundamentals of nutrition and feeding will be addressed, in particular, the classification of nutrients, their functions in the body, the food analysis methods, digestibility, intake control and classification of foods. Further, it is an objective of the course that students understand the difference between maintenance and production needs, know how to consult and correctly interpret tables of needs and food composition, and solve simple problems of rations. Also, provide scientific and technical methodologies for a correct identification of structures and anatomical-functional systems covering up the gastrointestinal tracts and digestion, for a full understanding of Nutrition and Food, standing out in a special way the aspects relating to his regulation and describing to the absorption mechanisms and the various nutrients that harmonize metabolic functions in healthy state.</p>																																								
Syllabus	<p>LECTURES: Importance of nutrition and feeding in animal production (farm species) and companion animals. Concept of nutrient, groups of nutrients and main properties. Types of feed. The digestive system and digestion in the different domestic animal species. Nutritional needs depending on the species, physiological and production states. Determination of digestibility, energetic content and metabolizable energy. Dietary management in ruminants and monogastric animals.</p> <p>PRACTICAL SESSIONS: Particularities of the digestive system and digestion of horses; Evaluation of body weight and body condition; Bases of feeding; Formulating diets based on the French system (INRA); Formulating diets based on the IU system (NRC);</p>																																								
Teaching methodologies (including assessment) <small>[Specify the types of assessment and the weights and evaluation criteria]</small>	<p>1 - Teaching methodologies</p> <p>LECTURES: Master classes with the Professors Manuals support. Statement of nutritional and dietary metabolic interrelationships. Continuous participation of students in clarifying scientific and technical conceptual questions. PRACTICAL SESSIONS: demonstrative sessions where methods of body condition scoring, weight estimation and ration problem solving are explained by the teacher, followed by students performing these methods independently, by themselves or in groups, with teacher support and monitoring.</p> <p>2 - Period assessment</p> <p>ASSESSMENT OF THEORETICAL CONTENTS (50% of final grade):</p>																																								

	<p>Continuous evaluation. Monography on a subject proposed by the teacher and semanal quizzes. 40% grade of 1st test + 40% grade of 2nd test + 10% monography grade + 10% quizzes Note. Minimal grade in each test is 9.5 out of 20.</p> <p>ASSESSMENT OF PRACTICAL CONTENTS (50% of final grade): written test. Minimum grade of 10 out of 20 marks.</p> <p>3 - Examination assesement</p> <p>ASSESSMENT OF THEORETICAL CONTENTS (50% of final grade): Global exam. Written test with all subjects covered in the Curricular Unit (80%) + 20% monography grade (100%) Minimal grade: 9.5 out of 20.</p> <p>ASSESSMENT OF PRACTICAL CONTENTS (50% of final grade): written test. Minimum grade of 10 out of 20 marks.</p>
<p>Bibliography</p>	<p>1 - Main Bibliography</p> <p>McDonald, P. et al. (1995). Animal Nutrition, 5ª ed. Longman Singapore Publishers</p> <p>Lewis, Lon D. (1995). Feeding and care of the horse. 2ª ed. Williams & Wilkins</p> <p>Martin-Rosset, W. (1990). L'alimentation des chevaux, éditions INRA</p> <p>Bassert, J M.; Thomas, J A. (2014). Clinical Textbook for Veterinary Technicians. (8th edition). Elsevier Saunders. (capítulos: Small Animal Nutrition e Large Animal Nutrition)</p> <p>2 - Complementary Bibliography</p> <p>Teachers' notes</p> <p>Frape, D. (1998). Equine nutrition and feeding. 2ª ed. Blackwell Science</p> <p>Geor, RJ; Harris, PA; Coenen, M. (2013). Equine Applied and Clinical Nutrition. Saunders Elsevier.</p> <p>NRC (2007). Nutrient Requirements of Horses, National Academic Press.</p> <p>Biblioteca Online (b-On)</p>
<p>Special Situations [Students with special status]</p>	<p>1 - Period assessment - Students with special status</p> <p>ASSESSMENT OF THEORETICAL CONTENTS (50% of final grade): Continuous evaluation. Monography on a subject proposed by the teacher and semanal quizzes. 40% grade of 1st test + 40% grade of 2nd test + 10% monography grade + 10% quizzes (100%) Note. Minimal grade in each test is 9.5 out of 20.</p> <p>ASSESSMENT OF PRACTICAL CONTENTS (50% of final grade): written test. Minimum grade of 10 out of 20 marks.</p> <p>2 - Examination assesement - Students with special status</p> <p>ASSESSMENT OF THEORETICAL CONTENTS (50% of final grade): Global exam. Written test with all subjects covered in the Curricular Unit (80%) + 20% monography grade (100%) Minimal grade: 9.5 out of 20.</p> <p>ASSESSMENT OF PRACTICAL CONTENTS (50% of final grade): written test. Minimum grade of 10 out of 20 marks.</p>